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Editorials

New Principles of Medical Ethics

The House of Delegates of the American Medical Association at its New York City meeting last month adopted a new set of Principles of Medical Ethics.

These new Principles have been consolidated into ten sections and supersede the cumbersome and somewhat ambiguous principles that previously existed.

Elsewhere in the *Journal* these Principles are printed in insert form and in such a way that they can be framed.

In many respects the Principles of Ethics are as important in the practice of medicine as is the science of medicine.

It is hoped that each physician will carefully read these principles and rededicate himself to them.

The taking of the Hippocratic oath at the time of graduation needs confirmation from time to time just as do all other principles by which we live, be they of church or country or home.

Rabies Prophylaxis in Man

In June, 1957, the *Journal* reprinted an excellent story about rabies written by Berton Roueché in the *New Yorker*. The problem of what to do when a patient is exposed is an ever repeating one for pediatricians, general practitioners, and internists. The set of circumstance surrounding the incident of one bite is never the same as another. The information on which decisions must be based changes as our knowledge of the subject increases. Karl Habel,[1] Chief, Basic Studies Section, Laboratory of Infectious Diseases, National Institute of Allergy and Infectious Diseases, has reviewed the subject and the following has been gleaned from the review.

Studies in experimental animals have shown that after rabies street virus is introduced into the gastrocnemius muscle of mice it can be demonstrated at the sight of inoculation for four days but by the second day is already present in the sciatic nerve. By the fourth day it is in the central nerve system. Once the virus reaches the central nervous system it multiplies and spreads peripherally along nerves including those which supply the salivary glands and is excreted in saliva. There is no evidence that viremia is part of the usual pathogenesis of rabies.

Experimental evidence indicates that virus is not likely to be in the saliva of a rabid animal until a few days before it develops clinical rabies *except in bats, especially vampire bats, who may carry the virus in their salivary glands for months while they are symptom-free.* While a dog under observation should not be killed for laboratory examination until definite signs of rabies are present, a bat should be killed immediately for such examination. The whole unmutilated head of the animal to be examined should be removed and kept in *wet* ice until the examination can be carried out.

The ability to actively immunize an exposed individual against rabies is possible only because of the long incubation period, the slow rate at which the virus travels to the central nervous system. In bites about the neck, face and head and in deep lacerating bites, any place on the body, the incubation period may be much shorter. The vaccine should be started immediately. Recently the high efficacy of the use of antiserum has been demonstrated. Antiserum alone is superior to vaccine alone but best results are obtained using both. Still better results are obtained if some of the antiserum is injected locally to infiltrate the site of

1. Habel, Karl: Rabies Prophylaxis in Man. Pediatrics, 19:923 (May) 1957.

the area of the bite. In view of the results of experimental and field trials, it is now thought that *antiserum plus vaccine provides the best prophylaxis of rabies in man and the combination should always be used in cases of severe exposure.* Recent experiments indicate that on certain dosage schedules rabies antiserum may interfere with the antigenicity of the vaccine. It has, therefore been recommended that the entire calculated dose of antiserum be given in a *single* dose at the start of treatment and this should be followed with at least 14 daily doses of vaccine.

Serious complications of vaccination is always possible. A discriminate use of vaccine is the only way to reduce their number. The vaccine should not be given except where there is a definite indication. The mere presence of a rabid animal in a household is not an indication to immunize all the family. Demyelinating destruction of the patient's own central nervous system appears to be due to hypersensitivity to the brain tissue in the vaccine. Efforts are being made to prevent this by growing the virus on other media. One, an inactivated-virus vaccine produced from rabies-infected duck embryos has been licensed for use in man.

The chart which follows should replace the one published in the *Journal* in February 1956.

TABLE I

Indications for Specific Treatment After Exposure to Rabies*

Nature of Exposure	Condition of Biting Animal		Recommended Treatment
	At Time of Exposure	During Observation Period of 10 Days	
I. No lesions; indirect contact only	Rabid		None†
II. Licks: 1) unabraded skin	Rabid		None†
2) abraded skin, and abraded- or unabraded mucosa	a. healthy	Healthy	None
	b. healthy	Clinical signs of rabies or proven rabid.	Start vaccine at first signs of rabies in animal
	c. signs suggestive of rabies	Healthy	Start vaccine immediately; stop treatment if animal is normal on fifth day after exposure.**
	d. rabid, escaped, killed, or unknown		Start vaccine immediately
III. Bites: 1) simple exposure	a. healthy	Healthy	None
	b. healthy	Clinical signs of rabies proven rabid.	Start vaccine at first signs of rabies in animal.
	c. signs suggestive of rabies	Healthy	Start vaccine immediately; stop treatment if animal is normal on fifth day after exposure.**
	d. rabid, escaped, killed, or unknown; or any bite by wolf, jackal, fox or other wild animal.		Start vaccine immediately.
2) severe exposure: (multiple; or bites on face, head, or neck)	a. healthy	Healthy	Hyperimmune serum immediately; no vaccine as long as animal remains normal.
	b. healthy	Clinical signs or rabies or proven rabid.	Hyperimmune serum immediately; start vaccine at first sign of rabies.
	c. signs suggestive of rabies	Healthy	Hyperimmune serum immediately, followed by vaccine; vaccine may be stopped if animal is normal on fifth day after exposure.
	d. rabid, escaped, killed, or unknown; any bite by wild animal.		Hyperimmune serum immediately, followed by vaccine.

*From Report of Expert Committee on Rabies, W.H.O., p. 12. This Table has been slightly revised and expanded in Report in the Third Session of the Expert Committee on Rabies. Wld. Hlth. Org. Techn. Rep. Ser.—to be published.
†Start Vaccine immediately in youn children and in patients for whom a reliable history cannot be obtained.
**An alternative treatment would be to give hyperimmune serum and not start vaccine as long as the animal remained normal.
Note: To be effective hyperimmune serum must be given within 72 hours of exposure. Dose: 0.5 ml/kg of body-weight.
These indications apply equally well whether or not the biting animal has been previously vaccinated.

Scientific Articles

SMALL BOWEL OBSTRUCTION

The value of the scout film of the abdomen as a differential diagnostic agent between simple and strangulated obstruction.

CLAUDE J. HUNT, M.D., F.A.C.S.

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Doctor Hunt holds membership in the American Goiter Association of which organization he is Past President, Western Surgical Association, Central Surgical Association, Pan Pacific, Southern and Southwestern Surgical Associations, and Internal Surgical Society.

Small bowel obstruction presents different problems than obstruction of the colon. In small bowel obstruction the causative agent is usually not an intrinsic lesion and an operation for primary releasing of the obstruction is to be desired as early as possible; but when there are electrolyte disturbances, blood volume changes and an extensively distended small intestine, immediate surgery sometimes becomes a dangerous procedure. Naso-gastro-intestinal intubation with decompression and with restoration of physiologic equilibrium becomes an important preoperative necessity. This, of course, is assuming that the bowel is simply obstructed, without vascular damage, and that strangulated obstruction is not present or imminent. In the latter case no great delay can be entertained and immediate operation is urgent.

In the colon, however, it is almost always surgically unsound to attempt primary resection of a lesion in the presence of acute obstruction. The procedure of safety is to surgically decompress the colon and prepare it for subsequent resection.

We, therefore, desire if possible, to distinguish between simple small bowel obstruction, in which there is no vascular damage, and strangulated obstruction where vascular impairment is the paramount issue.

It must be emphasized that obstruction of the small bowel, regardless of its nature, must be surgically released. There is perhaps one exception and that is the obstruction immediately following operation for inflammatory disease, which can be decompressed by intestinal intubation and a release of the obstruction often obtained, as the reaction subsides.

Peristalsis

The peristalsis of the small bowel is quite different from that of the colon. In the small bowel the peristalsis is from proximal to distal, in a rhythmic and consecutive manner; while in the colon it is segmental, one segment suddenly expelling its contents into the next distal segment. For example, the cecum and ascending colon expel by one violent painless contraction its contents into the right transverse colon. The stimulus to evacuation is initiated by the sudden deposit of the lower sigmoid contents into the rectal pouch. A failure to respond to the call of nature results in dehydration of the material and a hard dehydrated stool. Repeatedly ignoring such impulses of nature for evacuation is the contributing factor to irregularity.

Clinical Manifestations

The peristaltic phenomenon of the small bowel accounts for the characteristic symptomatology of simple nonstrangulating small bowel obstruction.

The clinical indications of obstruction of the small bowel are definite and characteristic. They are unlike any other form of abdominal colic and present none of the

manifestations of localized disease or inflammatory reaction.

The symptoms and physical signs of simple small bowel obstruction may be divided into three distinguishing manifestations. They may well be called the "big three" of small bowel obstruction. They are pain, peristalsis and borborygmus.

Pain in simple obstruction of the bowel is peculiar unto itself. It is in no way related to any other type of abdominal pain. It is not confined to any quadrant of the abdomen and has little or no localized tenderness or rigidity. It is, therefore, not a localized inflammatory process or localized colic. It is quite the contrary; it is generalized, diffuse and not associated with tenderness or muscle spasm. It is not continuous, but is spasmodic in character. It starts with intestinal cramps, diffuse in character, increasing in intensity and finally culminating in extreme severity, only to subside and recur in a short time. No other form of abdominal colic has this characteristic of diffuseness, periodicity and relatively negative physical observation. Only in strangulated obstruction or adhesive bands attached to the anterior parietal peritoneum will there be localized tenderness or muscle spasm.

Corresponding with this periodic spasm of pain there occurs synchronously visible peristalsis and audible intestinal sounds of particular diagnostic significance.

Peristalsis is sometimes visible in early obstruction, in patients whose abdominal wall is not too thick and obese. Observations should be made for its presence as the pain progresses, and often waves of peristalsis can be seen to pass across the abdomen. It subsides with the cessation of pain. It is significant and diagnostic if present, but not as frequently observed as the colicky pain and borborygmus.

Audible sounds of borborygmus are synchronous with intestinal colic and visible perstalsis. They increase in intensity, finally ending in a loud metallic sound with the cessation of colic and peristalsis. It may be audible to the patient or heard by auscultation. Pain and borborygmus are distinctive of obstruction and not commonly found in other forms of abdominal colic. In advanced obstruction, pain and peristalsis may be absent and the abdomen silent, because of distention and paralysis of the bowel.

These three clinical entities that constitute the "big three" of non strangulating obstruction of the small bowel are always present and are usually not appreciated sufficiently early.

Vomiting is of significance when it occurs with abdominal colic and its associated symptoms. With the first onset of obstruction, vomiting may occur immediately as a reflex response. It is related to the initial shock and not regurgitant in character. It is a protective action of nature to put the bowel at rest and to empty it of its accumulated contents. This may even occur in obstruction of the colon as a reflex physiologic manifestation. Early regurgitant vomiting occurs only in high bowel obstruction. Regurgitant vomiting is associated with progressive proximal bowel distention but in low bowel obstruction it takes a variable period of time, depending on the level of the obstruction, for it to occur.

High bowel obstruction produces early prostration, profuse emesis, dehydration and severe colicky pain. There is great loss of fluids and electrolytes, and the urinary output is scanty. Distention is minimal, not well seen on an x-ray film.

The passage of gas or the evacuation of the bowels, either spontaneously or by enema, may occur and give a false sense of security as to bowel patency. This has been emphasized by Wagensteen and Goehl.[1] It is present often in complete bowel obstruction and is reflex in character and another example of nature attempting to put the bowel at rest. It must be remembered that there is nothing physiologically or anatomically wrong with the bowel distal to the obstruction and it may function in an evacuating capacity with or without stimulation. Therefore, one should not be lulled into a false sense of security by the appearance of a good evacuation.

External evidence of strangulation is positive indication of obstruction and the presence of scars of a previous abdominal operation or abdominal distention are significant, when associated with the clinical symptoms of obstruction. Distention in

simple obstruction is symmetrical but in strangulated obstruction it is more localized and is most apparent over the loop of distended bowel. There is continuous pain, not of a colic type. There is tenderness and muscle spasm and evidence of shock, a fast pulse and an increased white blood count.

Value of Abdominal Roentgenogram

Although gaseous shadows in the small bowel have been known for over thirty years to be of some importance as an indication of disturbed continuity, the profession is still not sufficiently impressed with their diagnostic value to institute an early roentgen study in cases of suspected obstruction of the small bowel. Schwarz[2] in 1911 called attention to the gaseous shadows seen in the small bowel in the presence of obstructive lesions. He advised the use of an opaque medium as a confirmatory diagnostic agent. In 1914 Case[3] described gas shadows in the small bowel as a diagnositic aid in the diagnosis of small bowel obstruction. Kloiber,[4] in 1919 was the first to state that the diagnosis of small bowel obstruction could be made by the gaseous shadows on a roentgen negative and that a contrast medium was not necessary for confirmation. He demonstrated that gas shadows in the small bowel are abnormal and indicative of obstruction.

The typical transverse pattern described by Case is not necessary for a diagnosis of obstruction. A collection of gas in the small bowel in an adult may be considered pathognomonic of intestinal interruption. In very small children gas may be seen in the small bowel and have no diagnostic significance. The accumulation of gas after obstruction is not a late development; it is seen soon after the onset of the obstruction, being easily demonstrable as a rule in four or five hours. The distribution of gas in the small intestine in indicative of the type of lesion present. In a case of simple obstruction the distended intestines may be centrally located and transverse to the long axis of the body, while in the presence of strangulated obstruction the dilated loop or loops of bowel may assume no definite pattern and distention of the proximal bowel is slow to develop. If the walls separating the loops are thick, it signifies the presence of fluid or exudate. Collections of gas in the large intestine are quite in contrast to collections in the small bowel; the pattern is that of the colon, the bowel wall is thicker, and haustral markings are present.

The stepladder appearance of simple distention of the small bowel indicates advanced obstruction and is associated with a variable degree of abdominal distention.

Valvulae conniventes as emphasized by Lockwood[5] are seen with simple obstruction and not with advanced strangulation obstruction. Gas is present and can be demonstrated long before the characteristic pattern has developed. Thus it may be said fairly accurately that the roentgen ray can make possible an early diagnosis of small bowel obstruction, and that it can indicate the location and probably nature of the obstruction.

From an abdominal roentgenogram one can readily determine whether the distention is in the large or small bowel. If it is in the large bowel it is usually a closed loop obstruction, the ileocecal valve preventing regurgitation into the ileum. It shows a gaseous colonic pattern with haustral markings. If it is in the small bowel the type and character of the distention depend upon the nature of the obstruction and from the pattern of distention, the urgency of the situation becomes apparent.

When distention occurs postoperatively there may be a question as to whether mechanical obstruction or paralytic ileus is present. In the former event, the small intestines are obstructed; in the latter there is distention of both the small and the large bowel. A roentgen film shows the nature of the gaseous distention and is a valuable aid in distinguishing between the two conditions. If the obstruction is mechanical, the small bowel is distended and the colon is empty; if ileus is present, gaseous distention is apparent in both the small and the large bowel. Repeated films may be necessary to determine the certainty of ileus.

A simple adhesive band producing proximal distention of the bowel results in no immediate vascular damage, and in advanced obstruction operation may be de-

ferred until rehabilitation of the patient can be accomplished and intestinal decompression established. A loop obstruction, volvulus or strangulation, on the other hand, demands immediate operative intervention because of devitalization of bowel and subsequent intestinal gangrene. With such obstruction the bowel does not assume the transverse position to the long axis of the body but forms one or more distended loops, with no apparent pattern and with little or no proximal distention until the obstruction has been present for many hours. The reason for the delay in distention of the proximal bowel is not understood, but it is probably due to the associated hyperemia, edema and neurogenic imbalance.

The simple adhesive obstructions are the most common types involving the small intestines, and their presence can be detected early by roentgen study. The pattern is characteristic, and the sequelae of chemical imbalance, dehydration and distention are in proportion to the extent and level of the obstruction.

Obstructions of the small bowel frequently occur in association with inflammatory lesions within the abdomen and usually present the characteristic pattern of a progressive proximal distention in which the viability of the bowel is not in jeopardy. With this type of obstruction it is not often necessary to intervene surgically, as the condition results from localized inflammation and edema which narrow and constrict the adherent bowel to the point of obstruction. Surgical treatment is attended by great danger in the inflammed edematous bowel and may lead to perforation or extension of the infection. Intestinal decompression by the Miller-Abbott tube reduces distention and lessens the edema and hypertrophy proximal to the obstruction. With intubation and appropriate systemic measures, recovery will likely occur without resort to surgical measures. Enterostomy is not required, as a more effective decompressive measure is found in intestinal intubation. Enterostomy is ineffective, since it drains only a limited segment of the bowel or a few distended loops and has many hazards. I have discarded the procedure.

Occasionally an obscure hernia within the abdomen arouses the suspicion of intestinal obstruction, to be confirmed by a roentgen film. A Richter's hernia is very similar. The picture resembles that of a simple obstruction, with the added danger of segmental gangrene of the bowel.

In patients of advanced years on whom no previous abdominal operations have been performed, the possibility of a colonic lesion must be given careful consideration. This can be most effectively determined by a barium enema. Such a lesion having been excluded, some variety of small bowel obstruction must be considered.

Intestinal Intubation

The Miller-Abbott tube was used in the nonsurgical treatment of obstructions due to localized inflammatory processes. It was likewise used as an adjunct in more than one-half of 87 operative cases, either as a preoperative or as a post-operative measure. Clinical and roentgen evidence of post-operative small bowel obstruction has frequently been treated by decompression with the Miller-Abbott tube without operation.

Although the Miller-Abbott tube has fallen into disrepute in many sections of the country because of the difficulty of passage, it is beneficial and is employed by us when we deem it advisable. We consider the procedure of passing the tube to be a function of the roentgenologic department, which has voluntarily assumed this obligation and has had excellent success.

The tube is indicated in cases of simple adhesive obstruction with extensive proximal distention. It is valuable in cases of early obstruction to prevent postoperative ileus and to hasten restoration of an already partially distended bowel. It is contraindicated as a preoperative therapeutic measure in the presence of loop obstructions, volvulus, or strangulated obstruction. Immediate surgery is imperative because the bowel is in jeopardy. It may be valuable as a postoperative agent to prevent further distention and to hasten restoration of bowel tone.

The importance of competent roentgenologic assistance, therefore, in evaluating the nature of the obstruction of the small bowel

and the need for immediate operation, deserves emphasis. It is well known that, in some instances of advanced simple obstruction, surgical intervention is more safely and effectively performed after physiologic rehabilitation and intestinal decompression by intubation have been satisfactorily accomplished.

External Strangulation

Rarely is there any prolonged delay, because the patient is aware that the long-existing hernia is no longer symptomless but has suddenly become an irreducible mass, firm and hard. The abdominal pain and symptoms are associated with this persistent protrusion. Recognizing the significance of this situation the patient promptly calls his family physician and operative intervention is instituted usually before gangrene of the bowel intervenes.

I have not been sympathetic with attempted medical reduction of strangulated hernia. Even if it is successful, nothing permanent has been done to prevent a recurrence, and the viability of the reduced bowel is unknown. It is better to reduce the bowel under direct vision, carefully inspect it for adequate circulation and repair the hernial defect. Then, and only then, can one be certain of the viable condition of the bowel, and only then has something been done to prevent a recurrence of the catastrophe. I, therefore, do not attempt manipulative reduction of any strangulated hernia, but advise immediate surgical repair.

Mesenteric Thrombosis

Mesenteric thrombosis is in reality an obstruction, since peristalsis is abolished and bowel gangrene is imminent. The symptoms are different, as acute sudden pain may usher in the catastrophe. The roentgen picture shows gaseous distribution in the small bowel and perhaps also in the large bowel. With sudden onset, continuation of the pain and a distribution of gas in the small intestine, abdominal exploration should be done. Segmental resection may be possible, but too often the entire supply of the superior mensenteric artery is involved and nothing can be done.

Intrinsic Obstruction

Intrinsic lesions obstructing the small bowel are due to occasional obstruction from a neoplastic lesion. The symptoms are those of progressive intestinal distress with subsequent bowel obstruction and progressive abdominal colic from a gradual occlusion of the lumen by the neoplastic growth.

Surgical management of gall stone obstruction depends on the local condition of the obstructed bowel. If the stone can be dislodged it should be pushed upward to an uninvolved area of the bowel and removed through a longitudinal incision, which is closed transversely. If edema and reaction prevent dislodgment of the stone, resection with anastomosis is advisable. Incisional removal of a gall stone through an indurated edematous bowel is hazardous. It will not heal. We have had five obstructions of the lower bowel from a gall stone which were surgicly removed and two impacted stones in the rectum requiring surgical removal.

Neoplastic lesions require wide resection when possible. If inoperable, anastomosis should be made between the proximal and distal limbs of the bowel around the lesion. We have encountered only 7 neoplasms of the small bowel as compared to 485 resections for cancer of the colon and rectum.

Summary

The symptoms of the two types of small bowel obstruction have been clinically described and the differential diagnosis from colon obstruction has been emphasized. It has been urged that all early obstructions of the small bowel should be operated upon at once. Late simple obstructions, associated with marked bowel distention and systemic physiological changes, where the vascularity of the bowel is unimpaired, intestinal intubation and physiological restoration of impaired physiology is advised.

The value of the scout film of the abdomen as a diagnostic agent of small bowel obstruction and as a method of determining the level of the obstruction and a means of distinguishing between a simple and strangulated obstruction is emphasized.

Mention is made of the distinguishing features between the various types of obstruction. Methods of differential diagnosis are discussed and the urgency of the situation and the procedure we follow are described.

Intrinsic lesion, neoplastic and from gallstones are mentioned from the point of surgical treatment.

Personal conception of the management of external strangulated hernia is discussed.

Read before the Oklahoma Chapter, American Academy of General Practice, Oklahoma City, Oklahoma, Biltmore Hotel, February 4, 1957.

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Clinical Pathological Conference

held for the program of the Washington's Birthday Clinic, February 22, 1957*

Patient: Mrs. N. Y., 72 year white female

This patient had had vague gastro-intestinal symptoms for about two years before admission to this hospital. At times, immediately after having a bowel movement, she would feel that she had to have a bowel movement again. She also had the feeling of some intestinal distention. Her colon was always palpable. She had had an upper gastro-intestinal tract fluoroscopy a few months before admission to the hospital, and at that time a diagnosis of "chemical gastritis" was made. Eating of greasy foods or cabbage caused upper abdominal distress and also left a greasy taste in her mouth. The upper abdominal distress was slightly relieved by antacids. This distress tended to come on about one hour after meals. The size of the meal was not important. Eating or lying down did not seem to precipitate an attack of upper abdominal pain. She had had no vomiting.

On the day of admission at 11:15 a.m., the patient had a sudden loss of consciousness from which she slowly recovered over a period of two hours. During this two hour period she began to complain of abdominal pain and pain in the legs. The abdominal pain was described by the patient as being of intermittent cramping nature. At this time she had an absence of pulsation of the right dorsalis pedis artery (history of fractured hip with nailing). There was an absence of reflexes of the right lower extremity. Two hours after the original acute episode the patient had an aphasia and also weakness of the right leg. Later weakness of the left leg developed. These symptoms completely subsided about four

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hours after the original acute episode except for residual coldness of the right foot. After these symptoms had subsided the patient had difficulty in lifting her legs and feet, and there was numbness throughout the legs. Shortly after the beginning of the pain at 11:15 a.m. the patient vomited some reddish material which was considered to be either blood or questionably a portion of a red pill.

Physical examination at the time of admission (3:30 p.m.) to the hospital revealed the blood pressure to be 168-70, pulse 92, respiration 20, temperature 100.-8°F. The patient was alert and cooperative and had a clear sensorium. She appeared well developed, well nourished, and appeared to be approximately the stated age of 72 years. At the time of physical examination she did not appear to be either acutely nor chronically ill. She did appear to be very restless, first sitting and then lying in bed. Examination of the eyes revealed bilateral opacities of the lenses. The lungs were clear to auscultation and percussion. A grade I systolic blowing mitral murmur was present. No other pertinent changes were noted about the heart. No evidence of abdominal distention was present. There was a slight tenderness of the muscles of the extremities and the upper abdomen. On the day of admission the electrocardiogram was interpreted as showing an old myocardial infarct. At that time the blood pressure was 140-60; however, during that night it varied from 170-70 to 140-0 in a period of two hours. On the second hospital day the blood pressure appeared to be stabilized at 140-60. On the third hospital day roentgenograms of the abdomen revealed no free air in the peritoneal cavity. A very tortuous and somewhat dilated aorta was noted over the lower dorsal and upper lumbar spine. The kidney shadows appeared normal. There was a ring shadow in the right upper quadrant which was considered to be a calculus in the gallbladder. Degenerative changes in the lumbar spine were seen. A blade plate was noticed in the proximal right femur, apparently from an old healed trochanteric fracture. Additional films on the fourth hospital day revealed the esophagus and stomach to be normal except for a prominent hiatus hernia which did not completely reduce in an upright position. The stomach was otherwise normal. The duodenal bulb appeared normal. The lower thoracic aorta was seen to be rather markedly widened. On the fifth hospital day the gallbladder was not visualized with a single dose of dye. Roentgenograms of the chest revealed the heart not be be enlarged. No pulmonary lesions were identified, although a minimal amount of fluid in the thoracic cavity could not be excluded. On the fourth hospital day examination ~~of the~~ patient revealed no abdominal tenderness and no distress. There was no evidence of abdominal distention. Slight tenderness of the leg muscles was present. The blood pressure in each leg was 180-100. The patient felt better than at any time since the present acute episode.

Laboratory examination on the day of admission revealed the urine to be yellow, clear, and acid; to have a specific gravity of 1.022 and to have no albumin and no glucose. No red cells or casts were seen, and only a few white cells were present. An additional urine examination on the third hospital day was approximately the same. On the second hospital day the hemoglobin was 11.4 gms. per cent. The red blood cell count was 4,190,000. Slight variation of the size and shape of the red cells was noted. The white blood cell count was 8,850 with 90% neutrophils, 8% lymphocytes and 2% monocytes. The blood count two days later was almost identical; this time hemoglobin was 11.6 gms. percent, WBCs 8,200. The VDRL serology test for syphilis on the second hospital day was negative. The following day the NPN was 39 mgs. percent, and serum amylase 7 mgs. percent (normal 20 to 40 mgs. percent). On the fourth hospital day the blood sugar was 124 mgs. percent, and the NPN 40 mgs. percent.

During the morning of the fourth hospital day the patient appeared comfortable and was seen by one of the nurses at 11:00 a.m. At that time she was turned on her side and was noted to be in no discomfort. About 11:10 a.m. the nurse reentered the room and at that time the patient was gasping and had labored type

respiration. By the time the doctor could get to the room at 11:15 a.m. the patient was dead.

ROBERT H. BAYLEY, M.D.: Our 72 year old female subject, according to the contents of the first paragraph, has both upper and lower gastro-intestinal complaints. We later find x-ray evidence of a hiatus hernia of the paraesophageal type that is non-reducible. X-ray studies also reveal ring-like shadow in the gallbladder region and on the fifth hospital day an attempted visualization of the gallbladder showed "non-visualization." If the patient has cholelithiasis, I am going to take the position that the gallbladder lesion is asymptomatic and that the hiatus hernia satisfactorily accounts for the upper gastro-intestinal complaints. Greasy foods delay the emptying time of the stomach and would therefore prolong her indigestion. Since the hiatus hernia does not reduce in the upright position, we have an explanation of why she was not "worse on lying down."

In the second paragraph of the protocol, there are dramatic transient symptoms which I interpret as evidence of transient cerebral ischemia, transient ischemia of the lower regions of the spinal cord, and impairment of blood flow to the lower extremities, particularly the right.

In the third paragraph we find that she had an apical systolic murmur and a day or so was required for stabilization of the blood pressure at levels which can be regarded as satisfactory for a patient aged 72 years. In particular, we note equal pressures of 180-100 in the lower extremities.

In the laboratory findings, I would call attention to the two negative urinary studies, particularly the absence of a hematuria. The electrocardiogram taken on the day of admission is reported as showing evidence of "old myocardial infarction." I have examined this electrocardiogram and believe that the evidence for "old infarction" is based on the absence of an R deflection in the first two precordial leads. QRS transition is abrupt between V-3 and V-4 after which the R deflections are rather prominent and the intrinsicoid deflection appears to be somewhat delayed. I am going to interpret these last mentioned changes as evidence of left ventricular hypertrophy. In the presence of electrocardiographic evidence of left ventricular hypertrophy, it is necessary to interpret missing R deflections in the first several precordial leads with considerable caution. It is not unusual to have R absent at V-2 and it may be absent at V-1 normally. With conspicuous electrocardiographic evidence of left ventricular hypertrophy, R may be occasionally absent in leads V-1, V-2, and V-3, and in rare instances, absent in leads V-1 through V-4. I am therefore going to interpret this patient's electrocardiogram as displaying evidence of left ventricular hypertrophy without any definite evidence of myocardial infarction. In connection with the present illness, the consideration of acute myocardial infarction is an important one. Sudden loss of consciousness is not particularly uncommon in the more elderly subjects. The acute cerebral ischemia may be directly associated with low cardiac output or "heart shock" or with a serious arrhythmia or with both. Indeed, the acute cerebral ischemia of acute myocardial infarction may lead to more serious cerebral complications than transient loss of consciousness. Cardiac psychosis has been observed and hemiplegia has been reported. It may be argued that an electrocardiogram on the first day of the "heart attack" may show no changes of acute myocardial infarction for in isolated instances two or three days may pass before typical electrocardiographic changes appear. Against this diagnosis, however, is the absence of associated pulmonary symptoms and the difficulty in accounting for the spinal cord ischemia or the impairment of blood flow to the lower extremities. These symptoms are distinctly too early for embolism from a subendomural thrombosis of the left ventricular cavity. This complication may occur between the end of the first week and the end of the second month. Myocardial infarction therefore appears highly unlikely.

I have selected two of the patient's chest x-rays for presentation, the posteroanterior and the right oblique views. In the former, we commence with an examination of the bony cage. (Figure 1). Generally, it appears normal. In particular, there is

no notching of the lower borders of the ribs. This excludes the diagnosis of coarctation of the aorta. This may be important since ten percent of patients with coarctation of the aorta develop "dissecting aneurysm." We next examine the lung fields. At the right apex just below the level of the clavicle there is a paramediastinal or mediastinal mass. It might be a substernal lobe of the thyroid or some other upper mediastinal tumor. It is in the region of the innominate artery and could therefore represent an aneurysm of this vessel. If it is an aneurysm, with the negative serology, I would judge that its etiology is probably atherosclerotic. It may, of course, represent a dissecting hematoma of the innominate artery. There is an obvious difference in the pulmonary vascular markings of the two lung fields. These markings appear normal throughout the left lung field and are distinctly diminished throughout the right lung field. I am going to interpret this as evidence of obstruction to the right main branch of the pulmonary artery. A thrombosis of this vessel may have occurred. There is nothing in the present illness to indicate the occurrence of an acute pulmonary embolism. Chronic thrombosis of one of the larger branches of the pulmonary artery may be associated with pulmonary hypertension and chronic cor pulmonale. This situation is not present for the electrocardiogram shows left, rather than right, ventricular hypertrophy and the configuration of the pulmonary artery segment is inconspicious. At the base of the left lung field there is some irregular clouding and the costophenic angle is obscured. We are told that this represents a "minimal amount of fluid" in the left pleural cavity. I am unable to decide whether the evidence represents an old or recent event and will return to the matter subsequently. We next examine the cardiac silhouette. The level of the diaphragm obscures one-third or more of the ventricular shadow and we can therefore not support or confute the possibility of cardiac enlargement. However, marked cardiac enlargement may be exluded. The border of the ascending aorta can be made out. It is slightly prominent. The aortic arch is distinctly prominent and the descending thoracic aorta sweeps out into the left lung field and turns back rather abruptly behind the left heart border at the level of the left atrial appendage. I do not believe the prominence of the aortic shadow is beyond that which may be ascribed to an uncoiled aorta, or, a tortuous descending thoracic aorta.

Let us next examine the right oblique view. Here, the base of the vascular pedicale at the heart appears distinctly widened and configuration of the arch is of generous size. Above the arch we again see a rounded mass (2.5 cm. diameter) in the region of the innominate artery. We now recall that the fluoroscopic study disclosed "rather marked" widening of the "lower thoracic aorta."

With all this, we are ready to consider the diagnosis of "acute dissecting aneurysm of the aorta." Specifically, medionecrosis cystica is associated with hypertension when pregnancy and Marfan's snydrome are not under consideration, and medionecrosis cystica is the direct etiology of dissecting aneurysm. It permits overexpansion of the vessel. The initial intimal tear usually occurs in the arch and the whole thoracic arch may at once be involved with a dissecting hematoma. We shall suppose that this developed with a sudden loss of consciousness. We shall also suppose that one or both of the major branches to the head and neck were involved in the dissection. Two hours later the patient regained consciousness and complained of severe abdominal pain and distention with symptoms of lower cord ischemia and impaired blood flow to the lower extremities. At this time we may suppose that the dissecting hematoma advanced below the diaphragm to involve the abdominal aorta and probably both iliac arteries. Apparently, the renal arteries were not involved (two negative urinary studies). When the segmental branches of the aorta are involved near the level of the diaphragm, lower spinal cord ischemia occurs. It is to be recalled that these segmental arteries have collateral connections with the anterior spinal artery where they support circulation primarily to the sensory or dorsal regions of the cord.

We now need to invoke an apparent

"decompression of the dissecting hematoma." This might occur if the dissecting hematoma were to re-enter the lumen of the aorta through a second intimal rupture. Since re-entry is usually distal from the initial intimal tear, we will suppose that it may be near or below the level of the diaphragm. The dissecting hemotoma returns to the aortic lumen in only a minority of instances and readjustment of blood pressures and flow may occur without the phenomenon.

In the last paragraph of the protocol, we find that the patient died abruptly on the fourth hospital day. We may suppose that this was on the sixth hospital day since the patient is described as having an attempted gallbladder visualization on the fifth hospital day. If our diagnosis of dissecting aneurysm is correct, sudden death is the rule when the dissecting hematoma ruptures freely into one of the body cavaties. In this connection, let us suppose that "weeping" occurred into the left pleural cavity and thus accounted for the chest x-ray findings at the base of the left lung field on the fourth hospital day. With rupture into the left pleural cavity, the cavity would rapidly fill with blood as the patient became exxanguinated and gasping respirations would be in evidence during the last several minutes of life. This is somewhat of a "long shot" because dissecting aneurysm may rupture into the pericardial cavity, into either pleural cavity, into the posterior mediastinum, or into the retroperitoneal space. Nevertheless, the evidence is suggestive and I am going to hold to the point of terminal rupture into the left pleural cavity.

We are now ready to summarize a final diagnosis. Hypertension with slight to moderate left ventricular hypertrophy and medionecrosis cystica. Dessecting aneurysm of the arch and descending thoracic aorta, of the abdominal aorta and the iliac arteries, of the innominate and left common carotid arteries and of the segmental branches of the aorta in region of the diaphragm. Terminal rupture of the aneurysm into the left pleural cavity. Hiatus hernia of the para-esophageal type, and probably cholelithiasis. Old right pulmonary artery thrombosis.

In conferences of this kind I always like to take as many physicians as possible along with me. Therefore, if anyone has a strong opinion not in essential agreement with the above diagnosis, we will accept an expression of it at this time . . . Apparently not, so I will ask Doctor Snoddy to present the postmortem findings.

DOCTOR W. T. SNODDY: At autopsy the most important changes noted were within the aorta. There was a dissecting aneurysm extending throughout the entire length of the aorta and into the iliac vessels. The dissection appeared to begin about 5 cm above the aortic valve. The dissection did not extend up the great vessels of the arch of the aorta, however, clotted blood was present between the layers of the wall of the aorta near the orifices of the great vessels of the arch. The dissection did not involve the superior or inferior mesenteric arteries or the celiac artery and did not involve the renal arteries. The dissection did extend into the iliac arteries and also involved most of the lumbar or segmental arteries. Within the thoracic aorta particularly there was a large amount of clotted blood between the dissected layers of the wall of the aorta. This large area of separation produced marked thinning of the outer portion of the aorta and a perforation of the aortic wall was seen on the left side just above the diaphragm. This perforation measured about 1.0 cm in diameter. The left pleural cavity contained 1500 cc of liquid and clotted blood. Other less important findings at the autopsy included an esophageal hiatus hernia. The opening within the diaphragm measured 2.5 cm in diameter. The stomach did not protrude through this hiatus hernia at the time of autopsy. The mucosal surface of the stomach revealed no scars or foci of ulceration in the cardio-esophageal area. There was an ulcer of the stomach just above the pylorus on the lesser curvature and this ulcer measured 0.9 cm across. Four mixed faceted gallstones were present within the gallbladder. It would seem to me that the gallstones and the small prepyloric gastric ulcer, rather than the hiatus hernia, would better explain upper gastrointestinal complaints. The heart weighed 280 grams and revealed no evidence of a healed or recent infarct. The wall of the

left ventricle was 1.3 cm in thickness. No evidence of left ventricular hypertrophy was seen.

There was no pulmonary embolus and no definite lesion was seem in the upper lobe of the right lung. The pulmonary artery and its branches showed no lesion. The right paramediastinal or mediastinal mass could be explained by clotted blood expanding the wall of the aortic arch in its right superior portion.

The only pertinent microscopic finding was present within the aorta. Sections of the aorta revealed cystic medial necrosis with degenerative changes surrounding the cystic spaces. Cystic degenerative changes of the media have been considered to be the predominent underlying lesion of dissecting aneurysms of the aorta.

Treatment of this disease has been symptomatic and supportive until fairly recently. An ingenious method for surgical treatment of this disease has been divised by Doctor DeBakey. He creates a re-entry passage into the main aortic lumen thus allowing blood to flow from a double aortic lumen above into a single lumen below. He has had considerable success in treating patients for dissecting aneurysms by this method. Doctor Munnell is present in the audience and possibly he could discuss the surgical treatment.

Anatomic Diagnoses:

Idiopathic cystic medial necrosis of aorta.

Dissecting aneurysm of the aorta throughout the length of the aorta with perforation and left hemothorax.

Atalectasis of lung, left.

Cholelithiasis and chronic cholecystitis

Gastric ulcer

Esophageal hiatus hernia.

DOCTOR H. T. AVEY: Were there any evidences of Marfan's syndrome? Did the patient have long "spider fingers"?

DOCTOR SNODDY: No evidence of this syndrome was noted.

DOCTOR E. R. MUNNELL: Vascular surgery has recently entered the field of dissecting aneurysm with an operation proposed by DeBakey. (DeBakey, M.E., Cooley, D., and Creech, O: Dissecting Aneurysms of the Aorta, Surgical Considerations. Annals of Surgery. 142:586, 1955). This operation does what nature does in some cases; it produces a re-entry window for the dissecting hematoma. Thus, the procedure consists of division of the descending thoracic aorta just above the diaphragm, creation of re-entry site through the intima, closure of the distal aneurysm opening and anastomosis of the ends of the aorta. Operation should be done at the earliest opportunity and a very satisfactory percentage of salvage can be realized.

Figure I. P. A. View of the chest. Note the enlarged outline of the aortic arch, see text.

The x-ray of the chest shows a rather striking reduction of the bronchial vascular markings of the right lung. A possible explanation is an actual blockage of the right main pulmonary artery by the aneurysmal enlargement of the ascending aorta. Anatomically, after the pulmonary artery bifurcates, the right main pulmonary artery passes behind the ascending aorta between the aorta and the right main bronchus. One could speculate that the enlarged aorta compressed the artery at this site and thus the abnormality noted on the x-ray.

DOCTOR BAYLEY: I had considered Doctor Munnell's suggestion regarding obstruction of the right branch of the pulmonary artery. The x-ray evidence of involvement of the ascending aorta was not striking. If pulmonary vascular compression had occurred at the ascending aorta, I would have expected *increased* markings in the right lung field due to pulmonary vein compression.

Finally, not all patients die shortly after the development of acute dissecting aneurysm. After they recover they may live for years and present the picture of healed dissecting aneurysm. This clinical picture resembles that of luetic aortitis with aneurysmal deformity of the aorta and insufficiency of the aortic valve. The dissecting hemotoma does not directly damage the aortic valve but deforms the valve ring so that the diagnostic murmur of aortic insufficiency is present. When this combination is found in a patient with a negative history of syphillis and with a negative serologic test for syphillis, the diagnosis of healed dissecting aneurysm may be suspected.

Are You Facing a
RADIATION HAZARD?

P. E. RUSSO, M.D.

THE AUTHOR

Peter E. Russo, M.D., F.A.C.R., graduated from the St. Louis School of Medicine, St. Louis, Missouri, in 1930. Previously of Cleveland, Ohio, Doctor Russo makes his home in Oklahoma City where his practice is limited to his specialty of Radiology.

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This paper was delivered at the Annual Meeting of the Oklahoma State Medical Association in Tulsa, May 6, 1957.

With the beginning of the Atomic Age Radiobiology has become a science of major importance. In fact, the survival of the human race may depend on our knowledge and understanding of the effects of radiation on living and non-living matter. It has been known for over 60 years—since man produced the first x-rays and later isolated radium products—that this form of energy is a double edged sword. Because of its tremendous boon to civilization and mankind, we must avoid if possible, its dangers which are devastating and lethal.

Man has been exposed to radiant energy in his environment since the beginning of time. He has been able to survive successfully exposure to cosmic rays from the sun and radio active substances found in the earth and sometimes within our body, such as K^{40}. With the medical and industrial use of x-ray machines and radium products the exposure to radiation has extended to a fairly large segment of the population of the civilized world. In this field of endeavor there are many martyrs, who taught us the early dangers to excessive radiation exposure. Skin cancers, aplastic anemia, leukemia, and bone sarcoma were painfully recorded in the early days of radiology. With the more recent development of atomic power-atomic warfare and radio-active isotopes, exposure to radiation has been extended to a much larger segment of the human race from more powerful man made sources. The benefits to humanity have been in-

.sed a thousand fold—but so have the ards and dangers. Not only are we faced he danger of sudden destruction, but also lurking dangers related to gene muta- s, acceleration of the aging process, de- .sing resistance both to infectious and ignant diseases and a host of other prob- s. As physicians, these problems require utmost interest and serious attention. ir understanding and solution will be ıd in the field of radiobiology. It is the pose of this paper to bring to your at- ion some of these problems, which are mmediate concern to us—not only for benefit of our patients, but also for our- es and our future generations.

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In the September, 1956, issue of the *J.A.M.A.*, Dr. Shields Warren, in an article, "Longevity and Causes of Death from Irradiation in Physician," comes to the conclusion that radiologists live five (5) years less than their colleagues.

"In a study of the deaths of 82,441 physicians reported in the period 1930-1954 inclusive, it was found that radiologists die on the average, 5.2 years earlier than do other physicians. The nonradiology specialists known to be exposed somewhat to radiation also show definite shortening of life, but less than that of the radiologists. It may be concluded that exposure to ionizing radiation is the predisposing factor in this shortening of life." He concludes the article by stating, "The degree of precaution against exposure to ionizing radiation employed by some radiologists up to the present time has not been adequate to protect them from deleterious effects. The present standards for protection appear adequate, but more determined effort should be made to live up to them." Thus it is inferred from this study that exposure to radiation accelerates the aging process and decreases resistance to disease.

With this thought in mind I now wish to refer to an article, by Lauriston S. Taylor: Chief, Atomic and Radiation. Physics Division: National Bureau of Standard. Title, "Radiation Protection for the General Practitioner." Aug., 1956 *S.M.J.*

The first point he makes is that there are more x-ray units in the hands of the practicing physicians than the radiologist, by a factor or about 10 as shown in Table I.

TABLE 1

Use of X-Ray Equipment in the U. S.

	Number	Per Cent
Dentists	65,000	51.6
Practicing physicians	32,000	25.4
(General practitioners)	(20,000)	(15.9)
Hospital and clinic	15,000	11.9
Chiropractors	7,300	5.8
Osteopaths	3,800	3.0
Radiologists	3,000	2.4

"Secondly, the use of diagnostic x-rays by the general practitioner is usually in the role of a secondary tool in comparison with all the other tools and technics that he must master. Hence, it is only relatively rarely that the general practitioner has acquired the highly specialized background in radiologic physics necessary to fully appreciate and understand the technical aspects of radiation protection."

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He stresses the point that unless radiation is used wisely and safely, an increasing pressure to control and regulate its use by state agencies may be expected.

In the medical use of radiation, the problem of protection affects the patient, the physician, his personnel and his neighbors. Since the effects of radiation are always deleterious, every effort should be made to eliminate all unneccessary radiation exposure.

The basic maximum permissible exposure of the whole body to radiation has been set at .3 roentgens per week measured in air. Table 2 gives us some idea what dosage a patient receives from some routine x-ray examinations.

TABLE 2

Average Radiation Exposures

	Average Dose	Gonad Dose	Per Cent of Examinations
General radiographic	2.7 r	0.1—10%	52
Fluoroscopic (G.I.)	65 r	20—50%	15
Photo fluorographic (chest)	1 r	1%	33
Extremities, radiographic	2 r	0.1%	10
Chest	0.1 r	1%	37
G. I. series	33 r	25—50%	18
Pregnancy	20 r	10—50%	1

Fluroscopic examinations result in general in the highest body doses. Utmost precaution is required in the use of fluoroscopy both for the sake of the patient as well as the operator. The fluorscopist may receive exposure from several sources:

1. Scattered radiation from the patient.
2. Scattered radiation from improper cones and through the Bucky slot.
3. Direct radiation around screen edges.
4. Scattered radiation from walls, ceiling and floor.
5. Direct and scattered radiation on hands.

As a general rule the older the equipment is, or less expensive—the more the exposure factor is increased because of lack of protective devices.

Now I would like to bring to your attention the June, 1956, report by the National Academy of Science and its recommendations in the booklet entitled, "The Biological Effect of Atomic Radiation." In this rather comprehensive report, certain phases of the radiation problem are brought to our attention. "Any radiation is genetically harmful" and further "that genetic harm is proportional to the total dose." Radiation produces mutations and mutations in general are harmful. "This report recommends that the general public of the United States be protected, by whatever controls may prove necessary, from receiving a total reproductive lifetime dose (conception to age 30) of not more than 10 roentgens of man made radiation to the reproductive cells."

It is stated that over a 30 year period people receive 4.3 r. from natural radiation background, and about 0.1 r. from fall-out (if the weapons testing is continued at the same rate as during the past 5 years). It has been estimated that during the same length of time, an average of 3-4 r. from medical x-rays have practically doubled the exposure to radiation. Therefore, it is their recommendation that the medical authorities of this country initiate a vigorous movement to reduce the radiation exposure to the lowest limits consistent with medical necessity; and in particular that they take steps to assure that proper safeguards always be taken to minimize the radiation dose to the reproductive cells.

I have brought the various phases of this important problem for your thoughtful consideration. We as physicians, will be confronted with various problems of radiobiology, more and more. It is to our interest and that of our patients and friends, that it is within our province to properly utilize this radiant energy in its medical uses. Each of us, regardless of the sources we use—radio active isotopes, fluoroscopes, radio graphic or radio therapy machines of any type—must bring up to date our knowledge of radio biology and employ all of the safety devices known and thus avoid laws and other legislative actions in the use of these medical facilities, which might otherwise be imposed on us.

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The PHYSICIAN *as* NUTRITIONIST

I. PHILLIPS FROHMAN, M.D.

THE AUTHOR

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Doctor Frohman is Past Chairman of both the A.M.A. and Washington, D.C. Medical Society's Section of General Practice. He is a member of the Board of Directors of the American Medical Writers Association and chairman of the Mid-Atlantic Chapter of the American Medical Writers Association.

This paper was prepared by Doctor Frohman to be delivered before the Annual Meeting of the Oklahoma State Medical Association in May 1957. Although Doctor Frohman was unable to read the paper personally at the scientific meeting, he submitted the manuscript to the *Journal* for publication.

Before anyone can hope to begin to discuss so vast and, I might add, so important a field as nutrition one thing must be clear in our minds from the start — the difference between nutrition and just plain eating.

We Americans have often been referred to as the "best fed" but a very "poorly nourished" people. Yes, just gaze about you; see how well fed even we physicians are, and then remember that the average American adult female is approximately 16 pounds overweight. That is not nutrition, gentlemen; that is improper nourishment and overfeeding. That is eating without rhyme or reason — too many starches, not enough meats, vegetables or fruits — and the all-American breakfast: the usual cup of coffee, a cigarette, maybe a slice of weather-beaten toast, or that all-vitamin, all protein, all mineral food — the doughnut!

Likewise, if a non-specialist in the field of nutrition were to attempt to discuss so vast a subject without a definitive starting point he would be swallowed up and completely submerged in the topic. I believe to get a good anchor hold onto this subject, a beginning with the concept of optimal nutrition might be helpful.

Optimum Nutrition

Optimum nutrition might be described as the intake of nutrient elements in the diet in a proper state of combination or balance, in a proper kind and amount, so that the organism may always meet the varied exogenous and endogenous stresses of life, whether in health or disease, with a minimal demand or strain on the body's natural homeostatic mechanism.[1]

We Americans forget that it is impossible for two-thirds of the people of the entire world to procure an optimum diet, and many of these people not even enough calories. We are more fortunate in that optimum diet is in the reach of all of us in this country. We physicians have forgotten one of the most important causes of many of our own and our patient's systemic disorders — improper diet.

Physicians must begin to assume the role of nutritionist with greater responsibility in the studies and problems besetting our patients due to their improper eating habits. We must educate the general public in the proper selection and use of food. First, we must know it ourselves, and then impart that knowledge to our patients, both, the "healthy" and the ill.

For over a quarter of a century we have been preoccupied with disease and disease alone, and we have forgotten that all of our patients, except those with ulcers, gastritis, belching, or spastic colons, have an alimentary tract. In our forgetfulness we have allowed the beauty editors of non-professional magazines, beauty parlor operators, and lesser kind to take over the role of educators in the fields of diet, nutrition, and obesity.

Today all of us, physicians and patients, are living in a world of stress, both exogenous and endogenous, with a constant doing and going with very little moratorium for rest and contemplation. With this we are getting into the "rich-living" period of the forty and over years with improper food excesses, drinking of alcoholic beverages, and that "so-good-for-you" advertised cigarette necessary to "live modern".

Improper nutrition does not show its effects immediately, but the results are insidious in character with a slow day-to-day progress of tissue attrition with a gradual development of disorders without the appearance of noticeable signs of disorder. Often times the signals of obvious signs and symptoms of pathologic damage are delayed until impairment of health is far advanced.

Nutritionists and surgeons interested in nutrition as regards body and tissue repair, tell us that those patients in a state of optimum nutrition recover much more rapidly and with less permanent damage when exposed to trauma and exposure than patients in a state of unbalanced nutrition. Nutritional biochemists and research physicians in the field of nutrition have been working for many years toward the development of ways and means by which man can employ nutrients alone and in various combinations to maintain his health and his natural resistances or defense mechanisms at the peak of their operational efficiency. Correction of nutritional omissions and deficiencies can do much to help repair injuries induced through the years. Recent evidence[2] shows that certain types of nutritional deficiencies during the early developing period may produce tissue injury that may result in progressive degeneration with the advancement of age.

There are such things as minimum daily requirement standards for guidance in the field of nutrition. These standards are the Minimum Daily Requirements of Specific Nutrients of the U.S. Food and Drug Administration, and the Recommended Daily Dietary Allowances of the Food and Nutrition Board of the National Research Council. These tables are excellent yardsticks for minimum needs. But we physicians must keep in mind always the biologic and metabolic variations in man and, therefore we cannot treat all patients nutrition-wise in the same manner.

The physician, who is acutely aware that patients with disease or traumatic injuries most always have a disturbed metabolism often accompanied by large losses of vitamins, proteins, and other important nutrients, will do well to treat this portion of the patient's being as well as the obvious disease or trauma. All of us know that convalescence from disease, trauma, or exposure is materially shortened and rehabilitation more rapidly achieved if our patients are treated with therapeutic amounts of nutrients. It is difficult to arrive at a definite "optimal nutrition" for all patients with the use of the same slide rule, since all humans vary in their physiologic, biologic and metabolic functions. Their environments, their stresses, and their indulgences likewise vary.

The very magnificance of the body's ability to adapt itself to varying degrees of stress and nutritional deficiencies represents the double-edged sword lulling both patient and physician into a false security as regards body nutrition. The complex adjustments in metabolic patterns enable humans to function over a wide range of nutrient deficiencies and yet present a normal appearance. Nutritional aberrations are slow in producing morbidity or mortality, and mild deficiencies of a dietary essential such as vitamins, proteins or other substances, might go on for a long time before symptoms of deficiency appear.

From what has been said thus far it would seem essential to keep the body tissue at a level of "optimum nutrition" to the best of our knowledge and ability by exogeneous dietary means. In this manner when physical or mental stress is encountered the body's defense mechanisms will not be overburdened.

We must constantly bear in mind in our endeavor to create an "optimum nutrition state" that overnutrition due primarily to caloric excess (and I mean overeating) may place just as grave a metabolic burden on the body and may lead to serious disorders of the human physical structure.

Nutrition in the Newborn

We physicians do not have to disturb ourselves about nutrition in the newborn since we are trained to understand and realize that these infants need proper feeding schedules and foods with increasing types of balanced diets after the second or third day of life. And lest we do momentarily forget, the infant's mother will make good use of the telephone to remind

us that the formula and solid foods have not been changed or added to in the past few days. To discuss the problems and various diets in infants would be a waste of your time and an infringement of your generosity of your invitation to speak at this meeting. There are many excellent volumes by good authorities on the subject of infant feeding, and I daresay most of you have these books in your reference library.

Post-infancy Nutrition

Many of us in the practice of medicine, no matter if we are in general practice, pediatrics, surgery or any other specialty, forget that children, once they begin their kindergarten or first grade of schooling, have such a thing as an alimentary tract. Of course when little Johnny comes home with a "bellyache" we begin the usual course of medication after we rule out various acute abdominal conditions such as volvulus, appendicitis, hernia and others. But, after the acute episode is corrected by the grace of nature and a little of our medication, Johnny and his alimentary tract are again forgotten. Mother continues to feed her child anything he wants, probably just to keep him from fussing and fretting, with no thought as to the nutritional value of the food the child ingests. Candy, popsicles, and the constant din of the Good Humor ice cream man's jingly bells — always at meal time—take the place of a good substantial, well-balanced nutritional diet.

In a series of children in my practice picked at random for routine blood counts I found that these children had what I term the typical "candy and popsicle" blood picture. These were apparently healthy children and they were brought to the office for such symptoms as, "no appetite, no pep, cross, listless, cranky, or just routine examination for school." The average hemoglobin content was under 70 per cent, and the average red cell count under 3 million. The differential counts were in normal limits. Three or four of these children had hemoglobin concentration of under 50 per cent. These were supposedly well and healthy children! Gentlemen, this is nutritional deficiency of the worst order. Somewhere along the line the parents and we physicians forgot all about educating our families about diet and its value to the human body. These children were deeply engulfed in the habit of improper nutrition. I would be most happy to tell you about a magic formula for changing these deleterious food habits. Unfortunately there is no such formula. The best we physicians can hope for is to prescribe a proper diet, proper supplemental nutrients and vitamins — particularly *iron* and iron containing foods — and pray that the mother can entice the child to take the prescribed food and medication. If I had the legal power I would require that all lollipops and other candy and ice cream for children manufactured in this country or imported must contain the minimum daily requirements of supplemental vitamins and iron!

Perhaps many of the cases of the degenerative diseases and the increased number of forty year old patients with coronary thrombosis, may very well be resultant from the nutritional deficiencies of childhood, and the gluttonous excesses of alcohol, cigarettes, and overly rich and improper foods from the twenty-fifth year of life to the fiftieth year or less. Unfortunately, to my readable knowledge no concrete studies in this vein have been accomplished.

The protective mechanisms of the body for maintaining a nutritional constancy are not the same throughout life. In the newborn and infant this protective mechanism increases rapidly throughout childhood, reaches an optimum at early adulthood, and then gradually diminishes with advancing age. Likewise optimal nutrition may vary with the physiologic status at a given age, and may vary with each individual.

The Role of Hunger and Appetite in Nutrition

Hunger is defined by the dictionary as a craving for food, or any strong craving. Appetite is defined as the natural desire for satisfying some want or need, as of food. Carlson[3] has defined hunger as a "more or less uncomfortable feeling of pressure and pain referred to the region of the stomach". There are likewise differences in psychic association between hunger and appetite. These two, hunger and

appetite are understood to be sensations or feelings, and are not easily regulated. The desire to partake of food is affected by emotions, environment, temperature, exercise, and others.

What we eat, when we eat, and how we eat, is determined by innumberable socio-economic conditions and not alone by nutritional demands. National traditions, moral commands, and individual psychologic experiences play an important role in nutrition of the peoples in this world. Emotional experiences and the reflections of these experiences on the gastrointestinal tract are taken for granted by their constancy of occurrence, and we humans then restrict or change our diet to produce a sense of well-being after the ingestion of the "right" kind of food. The emotions and food are linked inseparably. Consider Thanksgiving turkey dinner with all the trimmings which is a must on that day. Yet, rarely do we crave or think about turkey the rest of the year. The diet limitations of the Lenten season, and the Passover holidays, are but two of the many periods of diet restriction and selection based on religious background. In this connection the so-called geophagia or the habit of certain tribes to eat clay of riverbanks was considered to replace certain deficiencies in their diet. The habit of small children to eat earth, dirt, chalk and almost anything else that might fit into their mouths—a habit that usually disappears when the child reaches the age of three or four years may be due to diet deficiency or to temperament. Some physicians may see some connection between these bizarre cravings and the fact that earth and ashes can act as absorbents such as kaolin, charcoal or bismuth, and that the floor coverings of chicken coops rich in vitamin B^{12}, and the antibiotic fungi in soil may have some importance on these earth and dirt eating children and others. The ingestion of plaster covered with lead paint will lead to serious consequences, and the sucking on a hairy teddy bear or other fuzzy object may produce a ball of hair or fuzz in the stomach or intestine of the child that requires surgical removal. These bizarre food habits are called pica. Schizophrenic children may often indulge in coprophagy.

On Obesity

The craving for food, especially for sweets, of obese patients has remained unexplained for a long time. A chronic, moderate hypoglycemia has been thought to be the cause for this craving, although it has been found very rarely in obese persons. There is the possibility that a localized cerebral hypoglycemia and an abnormally low blood sugar of the venous blood, returning from the brain, may play a role in the causation of this craving for sweets. Patients with functional postprandial hypoglycemia due to an island cell tumor of the pancreas are seldom aware, by instinct, that the eating of sweets could at least temporarily alleviate their attacks of sweating, tremor, incoherence or unconsciousness.

Special attention must be called to the lack of appetite in hepatitis, since this symptom often precedes the first objective signs of the disease.

Horror carnis, loathing of meat, is a complaint of so many patients with carcinoma of the stomach. Occasionally, it occurs in patients with gastric achlorhydria without carcinoma.

Nutritional Food Customs

Many of the foods or liquids used by us in this and other countries are merely taken because of family habit or custom, or long-term advertising sales talk. For instance, let us discuss the drinking of milk. We are told, and so are our patients, that milk is a necessity for our bones and teeth and that our bodies profit from its high calcium content if it is ingested during our adulthood. Today we know that milk actually favors the absorption of calcium. It is doubtful whether this is due to the calcium content of the milk. Large doses of milk have no effect on the bones of a patient with osteomalacia, likewise neither does large doses of calcium. But if the calcium intake is held low, and high doses of vitamin D are given osteomalacia improves readily. Since there is quite a bit of phosphorus present in milk causing the calcium of the milk to be transformed into calcium phosphate, which is absorbed with some difficulty, an excess of phosphorous remains forming insoluble calcium phosphate with part of the calcium of other

foods and these foods are then difficult to absorb by the intestinal tract.

Children with tetany, with severe hypocalcemia, become worse if "calcium rich" foods are given, and improve remarkably if milk and other dairy products are excluded from the daily diet.

Today irradiated milk contains large amounts of vitamin D. In spite of this increase in vitamin D and the greater absorption of calcium thereby, milk is not necessarily a wholesome food. The proteins and fats in milk are excellent nutrients for a semistarved people or for infants not on any other food, but it is questionable in my mind and in the minds of research nutritionists whether large quantities of milk should be taken by people who already suffer from an excess intake of fat.

Spinach eating is another nutrition fallacy we have believed to be of great benefit. The oxalate in spinach combines with the calcium present and forms the highly insoluble calcium oxalate, a salt which is completely insoluble and cannot be absorbed.

To delve into the misbeliefs pertaining to nutrition we physicians and our patients have adhered to for so many years would almost fill a volume. Perhaps that which I have touched upon may give you questions to ponder when you next casually prescribe diets, and special foods for your patients. Does the food you want your patient to have do what you want it to do? Will it add calcium? Will it add iron and minerals — after it is ingested? These and other questions should be asked. When you tell patients what to eat — ask yourself why?

In the United States with our high-protein, high-fat, and high-chloesterol diet certain metabolic diseases such as gout, diabetes, obesity, gall stones and premature arteriosclerosis are more prevalent. In those countries where the population lives on a vegetarian diet, one free of purins, gout is quite rare.

Vascular degeneration so prevalent among the diebetics in our portion of the world is practically nonexistent among the poor Chinese diabetics. In other countries where Chinese have acquired wealth and with this a richer diet, diabetes is much more severe. A low caloric diabetic diet comprised of a larger amount of carbohydrate and vegetable protein with marked decrease in animal protein and fat might be greatly beneficial to western diabetics.

The diet of the Oriental is almost devoid of animal food and therefore the blood cholesterol of these Orientals will be found to be in the range average of 150 milligrams per 100 cc. Whereas here in the United States blood cholesteral levels of 250 to 300 milligrams per 100 cc. are usual.

Today much of our diet is prescribed by the results of animal experimentation rather than the experiences collected at the bedside, the former method being the easier approach. Through television programs patients are told what not to eat, how to get thin, how to get fat, how to get pretty by food and facial makeup, why non-popping crispies are not better than those popped from guns by the manufacturers of cereals, and why rolled oats (for horses or humans) are better than flat oats. Clever advertising by large concerns sell undesirable foods with little value and perhaps much harm since these undesirable and "poor" nutrition foods may very well displace the "proper" nutrition foods on the pantry shelf and in the intestinal tract.

Obesity as a Medical Entity

The physicians of today have grave responsibilities in the field of nutrition as applied to their obese patients. We must look beyond the pale of fat we see on the patient. We must observe, understand, and recognize the psychological reactions which cause people to stuff themselves with fattening foods which produce obesity and the subsequent degenerative diseases. Diets and food should not be prescribed in a mechical way, with the exclusive consideration for the somatic symptoms. We must not berate our obese patients as weak-willed morons and accuse them of cheating on their diets. If you do this to your patients you then turn the entire issue of dietary changes for the treatment of obesity into a moral rather than a physical one. Grave consideration of the psychological factors involved is important for the success of the medical management, and for the emotional well-being of the patient.

In the obese hypertensive elderly patient

the usual prescription for the exceedingly monotonous low salt and low caloric diet seems almost obligatory, or so we think. True we do get a reduction in blood pressure and weight but usually at the price of acute depression and apathy in the patient.

In the younger females, obesity may be, and in many instances is, a social handicap. We physicians see these patients, and try to lose weight for them with never once delving into the main reason for their sudden interest in "their fat." Many of these patients after a comfortable weight loss, will lapse into their former eating habits. The reason is simple. Perhaps they did not get their boy friend to "pop the question" even in their sylph-like condition. Perhaps their husband forgot to buy that mink stole, or that expensive dress. We physicians must know the basic reason for their sudden interest in their obesity. At times when these expected rewards are not forthcoming their efforts are short-lived and are followed by weight gain due to relapse in their diet. The patient must understand that he or she is losing weight for his own welfare and general health, not for worldly gains or ten giant steps to the altar.

In the complete understanding of the dynamics of normal weight and obesity two important factors must be understood, (1) food intake, (2) energy output. In the psychoanalytic study of obese individuals, psychiatrists are more and more impressed that there is a psychodynamics of the excessive muscular inactivity as well as the excessive food intake. In many adolescent and young adult patients with a 20 to 40 pound obesity factor, physical inactivity is quite conspicuous. Lack of physical activity is likewise present in all adult cases though less prominent.

The Importance of Eating a Good Breakfast

Nutritionists and others interested in the field of nutrition are in accord that a good breakfast is probably the most important meal of the day. A deficit in the daily nutrient intake is very apt to occur when a poor start is made at the breakfast meal. In my own practice I have found that only one out of four children had an adequate nutrient intake at this very important meal time. In a study done on 500 Iowa school children it was found that only one out of five children had the daily required nutrient intake when the morning meal was below par. Similar findings have been reported for children in Maine, Indiana, Oregon and other states. What is the reason for this? Perhaps it is the pattern set at the breakfast meal with the missing nutrients and that this pattern is followed throughout the day with a like omission of these important foods.

It is highly important that we physicians concern ourselves with those patients who are "healthy" but in a state of poor nutrition.

At the University of Iowa, a research group under the guidance of the late Kate Dunn found that in healthy persons — children, young men and women, and men above 60 years of age with "no breakfast" there resulted reduced maximum work output, delayed reaction time, and increased tremor.

As children grow older, breakfast habits seem to become even more unsatisfactory. Girls seem to miss breakfast more often than boys, and the omission of the morning meal is more common on the weekends. The usually poor nutrient breakfast meal is comprised of cereal with milk and sugar, toast with jelly, or milk with buttered toast.

A poor breakfast as outlined above was consumed by 48 per cent of the 6, 7, and 8 year old boys, and 56 per cent of the girls. Adolescent girls, in a study by Stare in New York State schools, were found to have the poorest selection of breakfast items — 71 per cent in this group were considered to eat poor breakfasts.

There is very little improvement in the dietary habits in college age students over the rest of the population. In certain studies it was found that from 9 to 25 per cent miss breakfast at least twice a week.

In the aged there is no improvement in the food habits. These patients may be limited in their diet by income, chronic illness, lack of home life, and just plain lack of appreciation of the value of a good nutritious breakfast.

The omission by our patients of this

very important "starter" meal — breakfast — will usually show a deficit in their daily nutrient intake. While those of our patients who begin the day with an excellent nutritious breakfast will follow with their other meals in like manner.

Importance of Proper Nutrition in Industrial Workers

Have we, as physicians, ever considered the importance of proper nutrition in our industrial workers? Have we ever considered the importance of adequate nutrients, particularly breakfast, for these workers? Inadequate diets, either by choice or lack of knowledge in these workers costs many hours in lost time and results in less efficiency, and in increased accident proneness. The poorly nourished worker, and there are many such, although they appear to be healthy, may show more fatigue, and more time loss due to more frequent illness than the well nourished worker. The lack of a proper breakfast, and the in-between snacks of sweet foods and beverages including coffee in the famous "coffee-break" were found to be the chief causes of nutritional deficiencies in industrial workers. There is a definite mid-morning "slump" as a result of an inadequate or no breakfast, and this slump is not helped to any extent by the "coffee-break". It has been found in my own studies on office and industrial workers that many of these workers omit breakfast but depend on the "coffee-break" to bolster them up in mid-morning. Usually this mid-morning snack is followed by an inadequate lunch, and a poor nutrient dinner. Thus results the patient with poor nutrition, a poor surgical risk in many instances, and a frequent visitor to our offices with infectious diseases.

Two important groups in our society of industrial workers, those working the "swing" shift, and those working the "graveyard" shift must be carefully watched and educated in proper and adequate nutrition. These have been described by Goodhart[4] as poor in nutrition.

In industry where toxic substances are encountered, those workers with food intake deficient in certain nutrients such as protein and lipotropic factors show an increased susceptibility to the toxic substances they encounter.[5]

The degree of physical work involved by each industrial worker will determine the caloric needs of each. Calories will of necessity be high for those engaged in heavy work, and since thiamine needs are proportional to the caloric intake this also should be increased.

At times the patient we see may not be ill at all, but his weakness, irritability, and decreased ability to concentrate may very well be due to the long intervals between meals and a lower blood sugar level. The answer may not be, and usually is not, a larger meal, but more frequent meals. The larger meal may tend to make the worker drowsy and a lack of interest in physical and mental effort may result. Nutritious between-meal snacks, or more frequent meals are valuable to many of our workers. Remember, I *did not say* a coffee or cigarette break ... I said a *nutritious food break!*

Many industries have started programs for educating their employees in nutrition fully realizing that a well nourished employee is a better working employee with a very minimum of absenteeism.

Another group of great importance includes adolescents or young adults who do not live in their own homes, or with their parents, and who do their own cooking (be that as it may) or eat out. These patients are found to be in a poor nutritional state when compared to to-day's standards.

The nutrition of the executive — and I believe we physicians at times may be considered some sort of an executive — should receive more than casual attention. We executives are under considerable pressure and must be at top efficiency and therefore in a state of optimal health and well-being. This means proper nutrition. We physicians must not confuse obesity with good optimum nutrition. Proper nutrition will not produce obesity with its concomitant heart disease, hypertension, and other serious physical conditions.

Regular examinations for all of us, including the ever forgotten "Diet History" is just as important as the family history and the history of childhood diseases. What is important for us is certainly worthwhile for the health of our patients. Let us

remove the diet-care of our patients from the hands of the beauty editors of various magazines and newspapers. Let us likewise control the helm of proper direction in the field of nutrition rather than have this in the hands of television announcers and radio garblers.

Nutrition is the very heart of life and living. Without proper food there would be no sex, no love, no romance and of course no propagation of healthy children.

We physicians must realize that it is important to educate our patients in the art of proper nutrition, and that this part of patient-medical-education is our duly licensed privilege and, I might add, responsibility. The time to begin is now.

I have not attempted to discuss the field of nutrition as related to, and its importance in, the ill patient. This would require many pages and much time. If I have given you some proper nutrient for thought in this writing, and if you begin in the near future with yourselves and your families this will soon reflect in your patients and practice. We may then look forward in the next decade to a more healthy and more properly nourished people.

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President Begins Appointment of Committees for 1957-58

The following committees are those which have been appointed to date by John Flack Burton, M.D., President of the Association.

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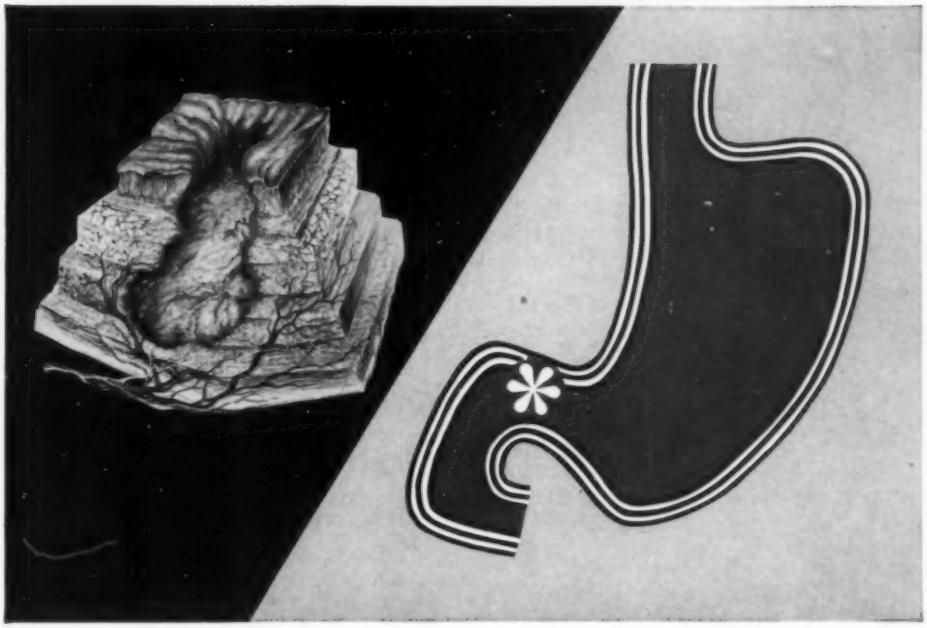

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SEARLE

PRESIDENT'S LETTER

Our great State of Oklahoma is celebrating its semi-centennial birthday and we as citizens are justly proud of our State's many achievements.

We as members of the medical profession are especially proud of the accomplishments of the medical profession in Oklahoma. From the hardy pioneer doctor who rode horseback and carried his supplies in his saddlebag to our doctor of today practicing in the most modern hospitals and equipped with the latest equipment; from the meager shelf in the back of the doctor's office to the atomic research laboratories of today; from the occasional visiting lecturer to full time professors, our profession has kept abreast with knowledge. We have built clinics; we have staffed our medical school and we have created a Public Health Department all ranking amongst the best of the nation.

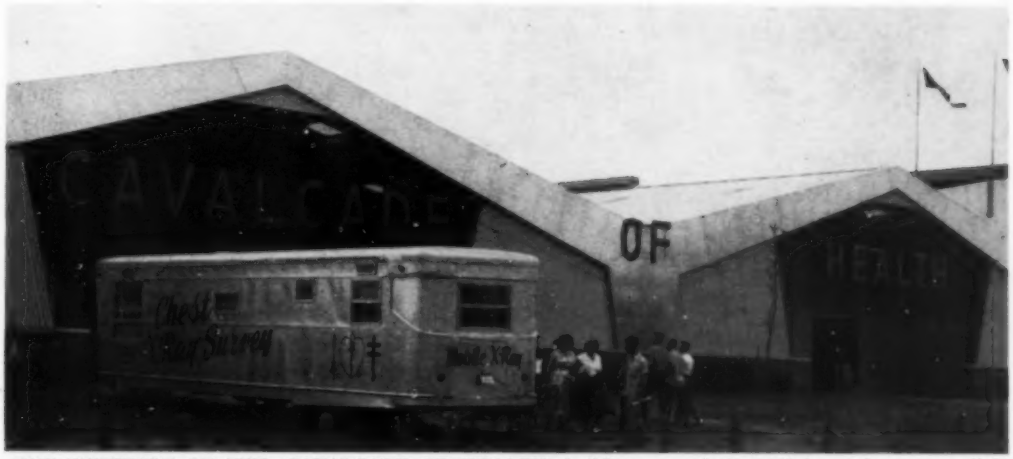
We are especially proud of our Medical Research Foundation—truly an Oklahoma Institution, conceived by farsighted doctors, built by perserverance and charity of both the medical profession and grateful public. It stands as a mighty rock amongst government built and government supported institutions, as a sign of private enterprise and private direction.

Recently I had the pleasure of attending the annual meeting of the directors of this institution and our attention was called to the completion of a beautiful Chapel built within the building of the Foundation. At first thought the idea of a Chapel in this most scientific building and amongst the activities of various sciences seemed a little incongruous. As I sat in the Chapel and admired its beauty and listened to the soft music I realized that it was most appropriate.

As I further meditated I though how applicable was the idea for the medical profession throughout the State. Naturally we could not all build Chapels, but we could create a Chapel within ourselves—that is in our daily work we could practice Humbleness. Thinking about each person we attend not as "just another case," but as a creature of God just like ourselves.

John Flack Barton, M.D.

Association Activities



THE EXTERIOR OF THE 'CAVALCADE OF HEALTH' building was designated by a large neon-lighted sign. The building leased by the Association to house the exhibits contained over 20,000 square feet of floor space.

OVER A QUARTER MILLION PERSONS VISIT CAVALCADE OF HEALTH

Over a quarter million persons visited the "Cavalcade of Health" show during the 24-day run of Oklahoma's Semi-Centennial Exposition at the Fairgrounds in Oklahoma City. The estimate was arrived at from figures recorded by the American Medical Association's hearing test exhibit. The total attendance for the Exposition which opened on June 14 and closed on July 7 was 1,461,256.

The health education show, which was the brain child of the Oklahoma State Medical Association, was approved by the Council in January. Selected to act as chairman of the committee to organize what was probably the State Association's greatest single public service endeavor was Henry H. Turner, M.D., of Oklahoma City.

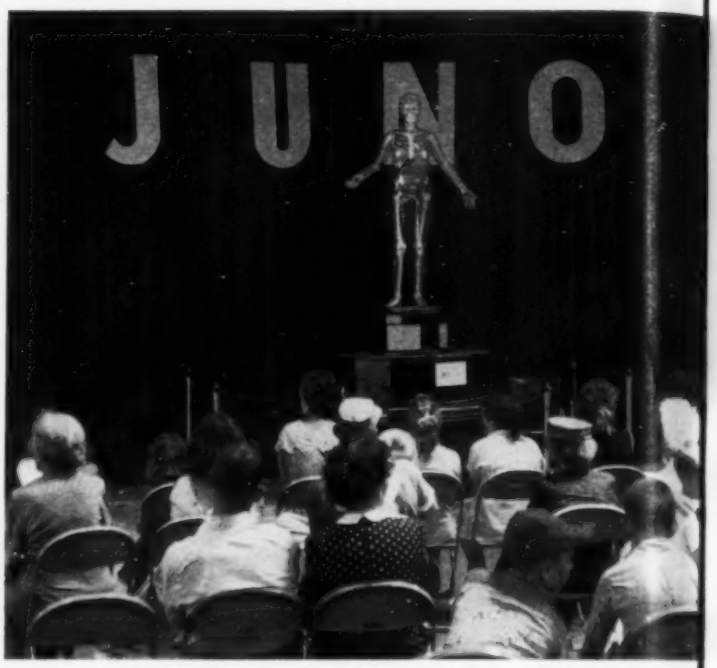
Assisting Doctor Turner were: Vernon Cushing, M.D., Vice-Chairman of the General Committee; Meredith Appleton, M.D., Chairman of the Executive Committee; John Cunningham, M.D., Chairman of the Exhibits Committee; S. Fulton Tompkins, M.D., Chairman of the Motion Picture Review Committee and William J. Dowling, M.D., Chairman of the Publicity Committee.

Many Interesting Exhibits

The "Cavalcade of Health" consisted of non-commercial exhibits prepared by voluntary health agencies, related medical organizations, official state agencies, pharmaceutical manufacturers, insurance associations, and other lay groups who are interested in promoting better health for Oklahoma.

One of the biggest attractions of the show was "Juno," the plastic lady loaned to the Association by its owner the Dominican Republic. The transparent figure which was built in Germay at the cost of $50,000 clearly indicated the principal internal organs as a simulated voice explained the function of each.

Other interesting displays were the atomic reactor, "Indian Medicine," and the American Medical Association's "Life Begins," "Medical Quackery," and "We See,"



JUNO, THE PLASTIC LADY, was one of the biggest attractions of the show. Principle internal organs of the transparent figure illuminated in synchronization as the simulated voice of the figure explained the function of each. The $50,000 exhibit was loaned to the Association by its owner the Dominican Republic.

"We Hear," and "Food, Facts, and Falacies."

Fifty years of medical progress were reflected in such comparative displays as physicians' offices of 1907 and 1957 and model laboratories pointing up today's complex practice of medicine as compared with early days.

Other exhibitors were:

Oklahoma Hospital Association, Oklahoma State Nurses Association, E. R. Squibb & Sons, Cerebral Palsy Institute, Oklahoma Medical Research Foundation, University of Oklahoma School of Medicine and Veterans Administration Hospital, University of Oklahoma Medical Center, American Foundation for Allergic Diseases, Oklahoma State Dental Association, American Medical Association, Smith, Kline and French Laboratories, Oklahoma Dietetic Association, Oklahoma City Dairy Council, American Dairy Association, National Dairy Council, Committee on Diebetes, Insurance Industry, Oklahoma State Heart Association, Oklahoma Chapter of the American Cancer Society, Samuel Roberts Noble Foundation, Inc., Oklahome State Veterinarians Asscoiation, Rehabilitation Agencies, National Society for Prevention of Blind-

Agencies, National Society for Prevention of Blindness, Delta Gamma Sorority, Oklahoma Association of Pathologists, Oklahoma Society of Internal Medicine, Oklahoma County Pharmaceutical Association, Oklahoma State Department of Health, Oklahoma Alcoholism Association, Oklahoma Chapter of Arthritis and Rheumatism Foundation, Oklahoma Dispensing Opticians Association, Oklahoma Tuberculosis Association, National Foundation for Infantile Paralysis, Oklahoma State Department of Mental Health, Oklahoma Association for Mental Health, Ciba Pharmaceutical Products, Inc., Blue Cross-Blue Shield Plans.

In addition to these exhibitors, the Oklahoma County Medical Society made a substantial financial contribution toward the promotion of the show.

A DRAMATIC DISPLAY was the American Medical Association's "Life Begins" series. The panels were explained by a tape recording.

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6. What causes RHEUMATIC FEVER?
7. Can RHEUMATIC FEVER
8. Do many children have Rheumatic Fever?
9. Does Rheumatic Fever damage the heart?
10. How can I learn more about Rheumatic fever & other diseases?

"ROBBIE, THE ROBOT" answered questions concerning heart diseases for viewers. "Robbie" was a part of the Oklahoma State Heart Association's exhibit.

FIRST TIME SHOWN—The Atomic Reactor pictured above was on display at the Cavalcade of Health. This was the first time the reactor had been shown to the public anywhere in the United States in 1957. Built by the Aerojet-General Nucleonics Company, San Ramon, California, the reactor was supplied the Oklahoma State University by the Atomic Energy Commission where it will be used for educational purposes.

FIFTY YEARS OF MEDICAL PROGRESS were reflected in this comparative display of physicians' offices of 1907 and 1957.

PLASTIC MOULAGES gave viewers a realistic picture of how cancerous portions of the body look. The display was was loaned to the Oklahoma Division of the American Cancer Society by Scott and White Clinic, Temple, Texas. Visitors to the booth were also given pamphlets telling them about the "Seven Signs of Cancer."

THE OKLAHOMA STATE NURSES ASSOCIATION selected "Nursing as a Career" for the theme of their exhibit which covered the education of the nurse for the duties and responsibilities she performs. Joining them in sponsoring the booth was the Oklahoma League for Nursing, the Oklahoma Board of Nurse Registration and Nursing Education and the Oklahoma State Association of Licensed Practical Nurses.

A.M.A.'s 106th Meeting Biggest Ever Held

The American Medical Assocation's 106th Annual Meeting in New York City was the biggest and probably the best ever held.

The attendance set a new all-time record. Total registration for the five-day session was 55,847, including 19,469 physicians. At the A.M.A. Centennial Meeting in Atlantic City in 1947, the total number of physicians was 15,667.

Oklahoma Participants

John Flack Burton, M.D., President of the Oklahoma State Medical Association, arrived in New York a few days early to attend a meeting of the Council on Medical Service of the American Medical Association of which he is a member.

Wilkie D. Hoover, M.D., Tulsa, was a Delegate to the Convention and also served on the Reference Committee on Miscellaneous Business. Also representing the Oklahoma State Medical Association were Malcom E. Phelps, M.D., Delegate from El Reno, and Alternate Delegates R. Q. Goodwin, M.D., Oklahoma City, and E. H. Shuller, M.D., McAlester. Representing the Dermatology Specialty group as a delegate was W. A. Showman, M.D., of Tulsa.

Henry H. Turner, M.D., Oklahoma City, participated in the general scientific meeting. Doctor Turner spoke on the subject "Recent Advances in Endrocrinology."

House of Delegates

The House of Delegates had a busy session and, despite the great volume of business, everything went smoothly.

Revision of the Principles of Medical Ethics, relations with the United Mine Workers of America Welfare and Retirement Fund, the federal government's Medicare program, new standards for medical schools, a new statement on occupational health programs and the issue of Social Security benefits for physicians were among the wide variety of subjects acted upon by the House.

The House voted the 1957 Distinguished Service Award of the American Medical Association to Doctor Tom Douglas Spies, head of the department of nutrition and metabolism at Northwestern University Medical School, Chicago, and director of the nutrition clinic at Hillman Hospital, Birmingham, Alabama, for his outstanding contributions to the science of human nutrition.

For the third time in A.M.A. history, the House also voted a special citation to a layman for outstanding service in advancing the ideals of medicine and contribution to the public welfare. Recipient of this award was Henry Viscardi Jr. of West Hempstead, New York, founder and president of Abilities, Inc., which employs only severly disabled persons.

Election of Officers

Gunnar Gundersen, M.D., of La Crosse, Wisconsin, member of the A.M.A. Board of Trustees since 1948 and chairman for the past two years, was unanimously chosen president-elect for the year ahead. Doctor Gundersen, who also was first chairman of the Joint Commission on Accreditation of Hospitals from 1951 to 1953, will become president of the American Medical Association at the June 1958 meeting in San Francisco. There he will succeed Doctor David B. Allman of Atlantic City, New Jersey, who became the 111th president at inaugural ceremonies in the Grand Ballroom of the Waldorf-Astoria Hotel during this year's meeting.

In addition to Doctor Gundersen, the new president-elect, the following officers were selected by the House on Thursday:

Doctor Jesse Hamer of Phoenix, Ariz., vice-president; Doctor George F. Lull of Chicago, secretary; Doctor J. J. Moore of Chicago, treasurer; Doctor E. Vincent Askey of Los Angeles, speaker, and Doctor Louis Orr of Orlando, Fla., vice-speaker.

Four new members were elected to the Board of Trustees: Doctor George Fister of Ogden, Utah, to succeed Doctor James R. Reuling; Doctor Cleon Nafe of Indianapolis, Ind., to succeed Doctor James McVay; Doctor James Z. Appel of Lancaster, Pa., to replace the late Doctor Thomas P. Murdock, and Doctor Raymond McKeown of Coos Bay, Ore., to replace Doctor Gundersen. Doctor Edwin S. Hamilton of Kan-

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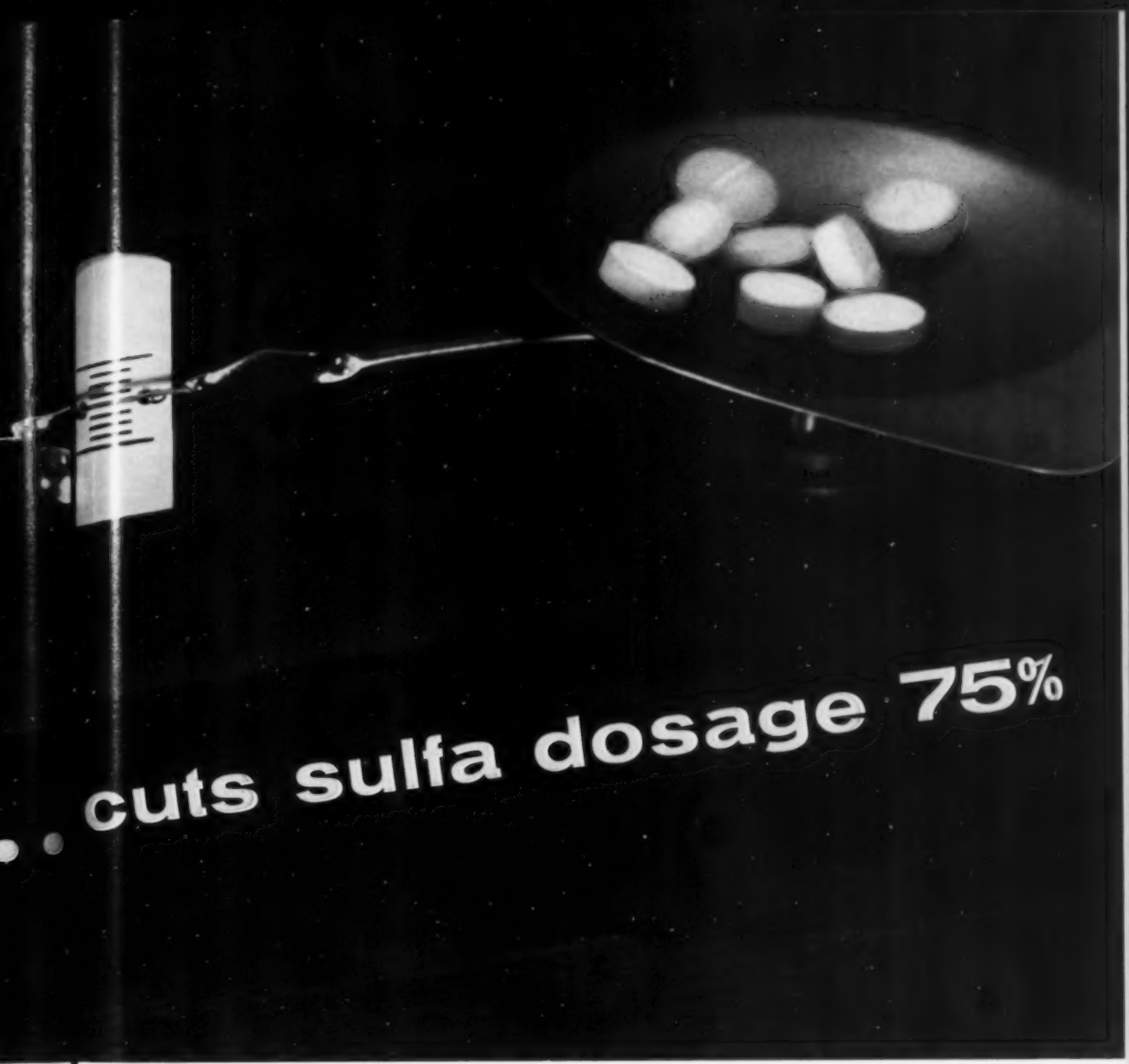
effectiveness for 24 hours

on a single (1 Gm.) dose



. . . cuts sulfa dosage 75%

KYNEX Sulfamethoxypyridazine is a completely new, long-acting single sulfonamide with clinical advantages hitherto unequaled in sulfa therapy—

LOW DOSAGE[1] —only 2 tablets per day.

RAPID ABSORPTION[1] — therapeutic blood levels within the hour, blood concentration peaks within 2 hours.

PROLONGED ACTION[1] — 10 mg. per cent blood levels that persist over 24 hours on a maintenance dose of 1 Gm.

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GREATER SAFETY — high solubility, slow excretion and low dosage help avoid crystalluria. No increase in dosage is recommended; the usual precautions regarding sulfonamides should be observed.

CONVENIENCE — the low maintenance dosage of 1 Gm. (2 tablets) per day for the average adult offers optimum convenience and acceptance to patients.

Each quarter-scored tablet contains: sulfamethoxypyridazine ... 0.5 Gm. (7½ grains).

1. Boger, W. P.; Strickland, C. S. and Gylfe, J. M.: Antibiot. Med. & Clin. Ther. 3:378 (Nov.) 1956.

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kakee, Ill., was elected chairman of the Board at its organizational meeting after the elections in the House.

Doctor Homer L. Pearson Jr. of Coral Gables, Fla., was renamed to the Judicial Council. Two new members were elected to the Council on Medical Education and Hospitals: Doctor Clark Wescoe of Lawrence, Kansas, to succeed Doctor Weiskotten, and Doctor Warde B. Allan of Baltimore, Md., to succeed Doctor F. D. Murphy of Lawrence, Kansas.

For the Council on Medical Service, Doctor Robert L. Novy of Detroit, Mich., was re-elected, and Doctor Hoyt Woolley of Idaho Falls, Idaho, was chosen to replace Doctor McKeown. Doctor Warren W. Furey of Chicago was re-elected to the Council on Constitution and By-Laws.

New Principles of Medical Ethics

The House approved the long-discussed revision of the Principles of Medical Ethics, originally submitted at the 1956 annual meeting in Chicago. The final version, presented by the Council on Constitution and By-Laws and then amended by reference committee and House discussions in New York, is published in insert form suitable for framing in this issue of the *Journal*.

Guides for Relations With UMWA Fund

In a key action on the basic issue of third-party intervention, as it affects the patient's free choice of physician and the physician's method of remuneration, the House adopted the "Suggested Guides to Relationships Between State and County Medical Societies and the United Mine Workers of America Welfare and Retirement Fund," which were submitted by the A.M.A. Committee on Medical Care for Industrial Workers. In approving the guides, the House also recommended that the Board of Trustees study the feasibility and possibility of setting up similar guides for relations with other third-party groups such as management and labor union plans.

The Medicare Program

The House considered three resolutions dealing with the federal government's Medicare program for the dependents of servicemen. The delegates adopted one resolution condemning any payments under the Medicare program "to or on behalf of any resident, fellow, intern or other house officer in similar status who is participating in a training program." Government sanction of such payments, the House declared, would give impetus to the improper corporate practice of medicine by hospitals or other nonmedical bodies. Such proposals, the House added, would violate traditional patterns of American medical practices, seriously aggravate problems of hospital-physician relationships, encourage charges by hospitals for residents' services to patients not under the Medicare program, and create a variety of additional problems in such areas as medical licensure and health insurance.

In another action on Medicare, the House recommended that the decision on type of contract and whether or not a fee schedule is included in future contract negotiations should be left to individual state determination. In this connection, however, the House restated the A.M.A. contention that the Dependent Medical Care Act as enacted by Congress does not require fixed fee schedules; the establishment of such schedules would be more expensive than permitting physicians to charge their normal fees, and fixed fee schedules would ultimately disrupt the economics of medical practice.

The House also suggested that the A.M.A. attempt to have existing Medicare regulations amended to incorporate the Association's policy that the practice of anesthesiology, pathology, radiology and physical medicine constitute the practice of medicine, and that fees for services by physicians in these specialties should be paid to the physician rendering the services.

New Statement on Medical Schools

To replace the "Essentials of an Acceptable Medical School," initially approved by the House of Delegates in 1910 and most recently revised in 1951, the House adopted a new statement entitled "Functions and Structure of a Modern Medical School." Presentation of the document followed a year of careful study by the Council on Medical Education and Hospitals in collaboration with the Association of American Medical Colleges.

The statement is intended to provide

flexible guides which will "assist in attaining medical education of ever higher standards" and "serve as general but not specific criteria in the medical school accreditation program." The document encourages soundly conceived experimentation in medical education, and it discourages excessive concern with standardization.

"No rigid curriculum can be prescribed for accomplishing the objectives of medical education," it states. "On the contrary, it is the responsibility of the faculty of each school continually to re-evaluate its curriculum and to provide in accordance with its own particular setting and in recognition of advances in science a sound and well-integrated educational program."

Adopt New Principles for Industrial Medicine

One of the most important actions taken by the A.M.A. House of Delegates was the adoption of a new statement on occupational health programs. This statement was simply entitled: "Scope, Objectives and Functions of Occupational Health Programs."

The statement was first approved by the A.M.A. Council on Industrial Health at its annual meeting in Los Angeles last February. Then it was approved by the Board of Trustees. Early in June this year, it was adopted by the House of Delegates after being given careful consideration by the reference committee on hygiene, public health and industrial health.

Why is this an important document?

"Because," as Council Secretary B. Dixon Holland said, "it will serve as a 'bible' to all physicians engaged in any way in industrial health work." It gives a clear-cut expression to medicine's acknowledgment that the American working man is entitled to the best health protection possible while he is on the job.

Good occupational health programs do not benefit the man on the job alone, but, as Doctor Holland says, they are good for business and the nation's economy.

In the past there has been no authoritative delineation of all that is encompassed in industrial medicine.

"An industrial physician has often been pictured as a glorified first-aid man to a captive clientele," Doctor Holland said, adding: "Labor often pictures him as the 'company doctor,' a hireling of management. And management has cometimes expected him to serve as a sort of a cat's paw to protect the company against claims."

The purpose of the new pronouncement is to define, improve and dignify the practice of occupational medicine in all phases, thereby helping all workers.

"In brief," Doctor Holland said, "the new statement will help the ethical, competent industrial physician clear up any doubts in the minds of his fellow-physicians in private practice as to whether he is practicing good occupational medicine, and thereby gain their good will and cooperation."

Social Security for Doctors

Two resolutions favoring compulsory inclusion of physicians in the federal Social Security system and another one calling for a nationwide referendum of A.M.A. members on the issue were rejected by the House. The delegates reaffirmed their opposition to compulsory coverage of physicians under the Old Age and Survivors Insurance provisions of the Social Security Act. They also recommended a strongly stepped-up informational program of education which will reach every member of the Association, explaining the reasons underlying the position of the House of Delegates on this issue. The House at the same time reaffirmed its support of the Jenkins-Keogh Bill.

26th Legislature Passes 14 Bills Related to Health Field

During the 26th Legislature, 1020 bills were introduced; 472 were introduced in the Senate and 548 in the House of Representatives. Of these bills, 488 were passed for a percentage of 47.84. Of the 488 passed and signed by the Governor fourteen were in one way or another related to the health field. This number does not include appropriation bills.

Appropriations

With regard to appropriations, the Board of Regents for Higher Education requested for the Medical School's teaching hospital $5,079,048. The Legislature appropriated $4,545,716 for the biennium.

The Board asked for $1,994,720 for the University of Oklahoma's School of Medicine and received $1,571,990 for the biennium.

The Department of Mental Health requested $27,050,000 for the biennium and got $17,974,108. This amount is an increase of thirty-three cents per patient over the previous biennium at which time the average money available per person was $2.13. With other funds that are available, the amount that will be aavilable per person for the next biennium is $2.75.

The State Health Department, for the biennium, requested $1,250,000; they were appropriated $737,525. The Health Department also receives approximately $500,000 from Federal funds which is a decrease in Federal moneys since 1950 of approximately $500,000.

Senate Bills

SB 2 providing for special education of exceptional children, the word "exceptional" meaning those cihldren needing special attention.

SB 184 creates a new code for the adoption of children and is a companion measure with SB 185 which establishes and defines the offense of trafficking in children.

SB 312 provides for voluntary admission and court certification of patients to private hospitals or institutions making the attending physician responsible for treatment and discharge. This bill was a request from the hospitals and psychiatrists for the use of private hospitals and institutions in the treatment of mental disorders.

House Bills

HB 520, 521, 522, 523, 525 all pertain to to either narcotic, barbiturate, and amphetamine violations, but do not restrict their use in any way by physicians.

HB 686 makes moneys available for the educations and general operational costs of any state student enrolled in the Oklahoma College for Women's Speech and Hearing Clinic.

HB 707 increases the annual registration fees of doctors of medicine from three dollars to five dollars.

HB 772 changes the name of the Crippled Children's Hospital to Oklahoma Children's Memorial Hospital.

HB 784 adds disease traceable to working with fissionable materials to Workman's Compensation coverage.

HB 825 provides a method for persons to donate their bodies or parts thereof. With the passage of this act, the Lions Clubs of the state are planning on financing the creation of an eye bank at the University Hospital.

HB 919 regulates the prescribing and selling of paregoric. It is now necessary that purchasing of paregoric be on a physician's prescription.

The two measures introduced in the Legislature concerning the lowering of standards for the licensure of pharmacists failed of passage. The chiropractic profession introduced four bills that would broaden the scope of practice, all of which failed to pass. Three bills introduced in the general field of visual sight failed of passage.

There were also numerous bills related to medicine and Workman's Compensation which also did not pass. Representative Guy Bailey of Ponca City, Chairman of the Public Health Committee, and Representative Dave Wilson, Fairland, Chairman of Committee on Professional and Occupational Regulations of the House, are due commendation for the excellent cooperation with the Association during the Legislature as is Senator Howard Young of Stigler who is the Chairman of the Public Health Committee in the Senate.

Naturally, with the return of Senator Louis H. Ritzhaupt to the Senate, the legislation in the health field was in excellent hands.

Oklahoma Citian to Help Organize Auxiliary to S.A.M.A.

Mrs. Robert Simon, Oklahoma City, was elected chairman of the Steering Committee of the Student American Medical Association at their annual meeting in May 1957. The Committee consisting of four ladies elected from each section of the United States and two members appointed from the S.A.M.A. will encourage and supervise the organization of an Auxiliary in all medical schools that have S.A.M.A. Chapters and will endeavor to set up the actual organization procedures for the next annual convention in 1958.

History Shows Need for Auxiliary

For over ten years, wives of the physicians all over the United States have been asked to speak to groups of Medical Students' wives on one subject: "What is a good doctor's wife and how can we become one."

These young women seem to be well aware of the problems they will meet in the next twenty years and they are most anxious to be prepared to meet that challenge.

S.A.M.A. Organized

The American Medical Association had already recognized the need of preparing the future doctors for their role as practicing physicians in their chosen communities and for their acceptance of responsibility as members of the various medical organizations and had encouraged and assisted the organization of the Student American Medical Association, now called the S.A.M.A., whose aims and purposes are, "to familiarize its members to meet the social, moral, and ethical obligations of the medical profession."

Another consideration was the opinion expressed by several deans of students that the students and their wives need very much to get better acquainted with the local practicing physician so that the young people could bet a better understanding of what the practice of medicine entails on a family basis. It would also enable the practicing physician to appreciate the problems of the students in relation to their home life.

As a result of all this thinking, the idea was conceived to utilize these four years as

MRS. ROBERT SIMON

a training period for the wives also, in order to provide a solution to what seemed to them a very urgent need. The logical answer was an auxiliary to the already established S.A.M.A. whose aims and purposes were so very similar.

In September 1955 such an auxiliary was organized at the University of Oklahoma Medical School after permission had been granted by all the proper authorities. The Woman's Auxiliary to the Oklahoma County Medical Society was the sponsoring organization.

Soon after the group had been organized in 1955 the Oklahoma Auxiliary presented the idea of a National Auxiliary to the National S.A.M.A. for its consideration. Mrs. Robert Simon, president of the Oklahoma Auxiliary, was invited to the national annual meeting of the S.A.M.A. in Philadelphia in May 1957 to present the idea to the Convention and to the wives of the delegates in person. With the financial assistance of several interested and generous physicians in Oklahoma City, Mrs. Simon was able to attend the Convention and present her project.

The House of Delegates voted to approve the organization of such an Auxiliary to the S.A.M.A.

The following Sunday morning at a brunch given to the young women by the Woman's Auxiliary to the American Med-

(Continued on Page 357)

Doctor Speed Honored For 50 Years' Service in Sayre

Friends and relatives from over Oklahoma and some from out of the state gathered in Sayre on June 3 to pay tribute to H. K. Speed, M.D., former president of the Oklahoma State Medical Association in 1938-39, when he was honored for his fifty years of service as a practicing physician in Sayre. The day had been officially designated "Doctor Speed Day."

The day's activities included a noon luncheon meeting given by the Rotary Club with the Rotary clubs at Erick and Elk City joining for the occasion, selecting a Speed Day King and Queen, judging a baby contest, and finding the youngest and oldest Speed babies and the family with the largest number of Speed babies. A parade in downtown Sayre was held in the afternoon and concluding the event was a reception under the sponsorship of the Kiwanis and Business and Professional Woman's Clubs.

At the Rotary luncheon, Doctor Speed received many tributes and was presented with a plaque in appreciation of his untiring efforts by the Eric Rotary Club and one from the Sayre Chamber of Commerce. The school board presented life-time tickets covering all school activities to Doctor and Mrs. Speed and the mayor presented a bundle of letters of appreciation from hundreds of close friends including tributes from Senator Mike Monroney, Senator Robert S. Kerr, and Governor Raymond Gary.

H. K. SPEED, M.D., left, is presented hundreds of congratulatory letters by Mayor Cecil I. Neely of Sayre at the "Doctor Speed Day" luncheon.

FIFTY YEAR PIN—Ross Deputy, M.D., right, of Clinton makes a presentation of a 50 year pin to Doctor Speed during a brief ceremony at the "Doctor Speed Day" luncheon.

Resolutions adopted by the State Senate and House of Representatives commending Doctor Speed for his 50 years of active service were read. Ross Deputy, M.D., Clinton, Counselor to the Oklahoma State Medical Association presented Doctor Speed with a 50 year pin.

Gubernatorial Candidates Announce

Following the adjournment of the Legislature, numerous gubernatorial candidates made known their desire to serve the State in the capacity of governor.

Among those announcing for governor was Speaker of the House Mr. B. E. "Bill" Harkey who for over twleve years had been attorney for the Oklahoma State Board of Medical Examiners.

Third Southeastern Oklahoma Symposium Set for August

The McAlester Clinic Foundation will present its Third Annual Southeastern Oklahoma Clinical Symposium on August 10 and 11 at McAlester, Oklahoma. The Symposium is approved by the American Academy of General Practice in Category 1 for ten hours.

The program for the two-day meeting will consist of scientific papers, clinical presentations, panel discussions and technical exhibits.

Guest speakers will be: David C. Humphrey, M.D., Internist, Cleveland, Ohio; John F. Burton, M.D., Plastic Surgeon, Oklahoma City; Adolph N. Vammen, M.D., OB-Gyn, Tulsa; John A. Schilling, M.D., Surgeon, Oklahoma City; Judge Andrew J. Wilcoxen, District Judge, Muskogee; Edmond H. Kalmon, M.D., Radiologist, Oklahoma City; Tom S. Gafford, M.D., Pathologist, Muskogee; Louis J. West, M.D., Psychiatrist, Oklahoma City; and J. Raymond Stacy, M.D., Orthopedist, Oklahoma City.

A golf tournament and dinner-dance have been planned to provide entertainment for those attending the Symposium. A program for the ladies is also on the schedule.

There is no charge for the meeting except the $2.50 each for the dinner on Saturday night.

Reservations may be made by writing to Mr. Charles A. Miller, Business Manager, McAlester Clinic, Third and Seminole, McAlester, Oklahoma.

Garfield-Kingfisher Members Immunize Flood Workers

Members of the Garfield-Kingfisher County Medical Society donated their time and equipment in giving free typhoid fever vaccinations to Enid residents and flood workers. The city of Enid raised funds to purchase the vaccine for the 324 vaccinations given.

Assisting the doctors by registering those receiving shots were members of the medical auxiliary.

The Society has volunteered their time and equipment to give the remaining two shots of the series later.

NOBLE S. BIRKETT

Detailmen Elect Oklahoma Citian National President

Noble S. Birkett, Oklahoma City Ortho Pharmaceutical Corporation representative, was elected the 9th national president of the Medical Service Society of America at the organization's recent convention in Memphis, Tennessee. Jim Avery with McNeil Laboratories of Oklahoma City was elected secretary-treasurer.

Medical Service Society of America, with offices in Oklahoma City, is recognized by the American Medical Association as the official national professional society of ethical medical representatives.

Annual projects of the Medical Service Society include presentation of a Plaque Key award to the General Practitioner of the Year as selected by the American Medical Association and operation of message center services at medical conventions.

Dr. O. E. Howell Honored By Community For Service

O. E. Howell, M.D., 80-year-old pioneer Oklahoma physician, was honored in a community celebration at Washington on June 16, 1957, in recognition of his service. Doctor Howell lives in Norman and commutes to his office in Washington.

Doctor Howell has practiced medicine 58 years in Oklahoma, with 29 years in the Washington community.

Medical Quackery Investigator Proves To Be Popular Speaker

Richard M. Stalvey, known as "Mr. F.B.I. of Medical Quackery," proved to be a very popular speaker with various organizations during his Oklahoma City visit for the Semi-Centennial Exposition, June 14-July 7. Stalvey, whose official title is Administrative Assistant to the Director of the Bureau of Investigation of the American Medical Association, scheduled speaking engagements in addition to spending much time at the A.M.A.'s medical quackery booth at the Cavalcade of Health.

Among organizations requesting to hear Stalvey's illustrated speech on medical quackery were: the Midwest City Kiwanis, Midwest City Rotary Club, the El Reno Lion's Club, Village Kiwanis Club, Advertising Club, Junior Chamber of Commerce of El Reno, Blue Cross-Blue Shield of Tulsa, the Oklahoma University School of Nursing. and the School of Nursing at Wesley Hospital in Oklahoma City.

The Bureau of Investigation of the A.M.A. acts as a clearing house for information on various phases of quackery or pseudo-medicine. Among the subjects with which it deals are "patent" medicines, cultists, food faddism, "new" or secret treatments, and illegal practitioners.

Stalvey came to the Bureau of Investigation following three years service with the U.S. Food and Drug Administration as a specialist in drug and device cases. He has been a member of the A.M.A. staff three years.

C. W. Joyce, M.D. Awarded 50-Year Pin

Charles W. Joyce, M.D., Fletcher's veteran physician, was awarded a 50-Year Pin at a recent meeting of the Comanche-Cotton Medical Society in the Hotel Lawtonian. Making the presentation to Doctor Joyce was Charles E. Green, M.D., president of the Comanche-Cotton County Medical Society.

Have You Heard?

H. W. FORD, M.D., who has practiced medicine 50 years, the last 40 of which have been in Tulsa, recently celebrated his 73rd birthday.

JAMES W. WHITE, M.D., Tulsa Pediatrician, was among 186 doctors elected to fellowships in the American Academy of Pediatrics recently.

R. C. PIGFORD, M.D., recently received an appreciation certificate for his work in the battle against heart disease from the Oklahoma State Heart Association. Doctor Pigford is the education-public relations chairman to the Tulsa County Heart Association.

CLARENCE E. BATES, M.D., has been named superintendent of the Veterans Home-Hospital in Sulphur.

T. H. MCCARLEY, M.D., of McAlester was honored recently by members of the Oklahoma Board of Health for his 12 years service as a member of the board. Doctor McCarley is being replaced by L. N. Dakill, M.D., also of McAlester.

GEORGE TALLANT, M.D., of Frederick was guest speaker for District 20 of Oklahoma Nurse Association when members met June 6 in the conference room of the Frederick hospital. Doctor Tallant's topic was "Radiological Warfare and Atomic Medicine."

W. T. MCCOLLUM, M.D., Oklahoma City heart specialist, was guest speaker at a meeting of the Britton Kiwanis Club on May 16. Doctor McCollum spoke on the care of the heart.

PAUL LINGENFELTER, M.D., Clinton, discussed phases of the battle against cancer as guest speaker of his local Kiwanis Club in May.

THURMAN SHULLER, M.D., McAlester, addressed the local Kiwanis club in May discussing the polio vaccination program with the group.

D. D. PIERSON, M.D., of Mangum was speaker at a meeting of the Greer County Heart Association on June 7.

OPENING RECENTLY was this new clinic in Altus located at the corner of Hudson and Cypress streets. The one-story structure contains 9,500 square feet of floor space and has 11,000 square feet of paved, off-the-street parking space. The building houses the offices of doctors J. H. Abernethy, Wayne Starkey, W. D. Holt, R. H. Fox, C. D. Ray, and C. L. Tefertiller. Sharing the building with the physicians are Alva Hill, D.D.S. and Morris Willis, pharmacist.

Heart Association Elects State Officers

The Oklahoma State Heart Association elected officers at its seventh annual meeting held June 15 in Oklahoma City. Officers elected to serve during the coming year were: Mr. Charles Follansbee, President, Tulsa; William Best Thompson, M.D., President-Elect, Oklahoma City; Mr. Gerdie Hurd, Vice-President, Sallisaw; Mr. Paul C. Bachmann, Secretary, Cleveland; and Mr. W. D. Finney, Treasurer, Ft. Cobb.

Physicians serving on the Board of Directors are: Ray B. Graybill, Ardmore; Harold M. McClure, Chickasha; H. Bill Howard, Lawton; F. Redding Hood, Oklahoma City; William S. Jacobs, Tulsa; J. B. Morey, Ada; C. J. Roberts, Enid; Kirk T. Mosley, Oklahoma City; Terrell Covington, Tulsa.

Dean Walker, Tulsa; William Best Thompson, Oklahoma City; E. C. Mohler, Ponca City; James C. Peters, Tulsa; Robert H. Bayley, Oklahoma City; C. S. Lewis, Jr., Tulsa; H. W. Wendelken, Miami, are also on the Board.

Physicians attending the scientific session of the day-long meeting heard Michael Ellis DeBakey, M.D., chairman of the Department of Surgery at Baylor University College of Medicine in Houston, Texas, speaking on "Changing Concepts in Aortic and Arterial Surgery."

Officers of State Associations Hold 13th Annual Meeting

The Conference of Presidents and Other Officers of State Medical Associations held its thirteenth annual meeting on Sunday, June 2, 1957, in New York City. Guthrie Y. Graves, M.D., President from Bowling Green Kentucky, presided over the meeting held in the Waldorf Astoria's Sert Ballroom.

C. E. Northcutt, M.D., Ponca City, served as president of the third Conference.

John W. Green, M.D., Vallejo, California, is President-Elect and James A. Waggener of Indianapolis, Indiana, is Secretary-Treasurer.

AUXILIARY TO S.A.M.A.

(Continued from Page 353)

ical Association, the first steps toward organization were taken.

Mrs. Paul C. Craig, President-Elect of the Woman's Auxiliary to the American Medical Associaiton; Mrs. Alfred W. Crozier, President of the Pennsylvania Auxiliary; Mrs. George H. Garrison, appointed laision from the National Auxiliary, were appointed to lend assistance.

Future Looks Promising

The future of the organization looks very promising indeed and it is hoped that the young women who take advantage of the program will find the life as a doctor's wife more rewarding and satisfying because they learned in advance something of the ideals and purposes of their husband's profession and were also prepared for the responsibilities which their position as a physician's wife in the community entails.

Deaths

Otis Guy Bacon, M.D.
1880-1957

Otis Guy Bacon, 76-year-old pi oneer physician who had lived in Frederick since 1919, died July 7, 1957, after an illnes sof eight months.

Doctor Bacon was born October 20, 1880, in Jonesboro, Tennessee, and received his Doctor of Medicine degree from the University of Louisville, Kentucky, in 1907. He entered practice at Cameron, Texas, but moved to Oklahoma the next year, settling in Davidson. In 1919 he moved there to Frederick where he practiced until his illness.

Doctor Bacon was a member of the Tillman County Medical Society, a life member of the Oklahoma State Medical Association, and a member of the American Medical Association.

Robert William Head, M.D.
1923-1957

Robert William Head, M.D., thirty-three year old Blanchard physician, died in Oklahoma City on June 18, 1957.

Doctor Head was born in Paris, Texas, on December 18, 1923, and graduated from the University of Oklahoma School of Medicine in 1948.

Doctor Head is survived by his wife and three children.

Samuel Lee Burns, M.D.
1876-1957

Samuel Lee Burns, M.D., 81, of Stonewall died July 6, 1957, in Ada.

Born in Arkansas, Doctor Burns began practice of medicine in 1898 after graduating from Vanderbilt University School of Medicine.

Doctor Burns was a member of the Fifty Year Club, the Pontotoc-Murray County Medical Society, a life member of the Oklahoma State Medical Association, and a member of the American Medical Association.

Charles M. Ming, M.D.
1889-1957

Charles M. Ming, M.D., 68, retired Okmulgee physician died May 27, 1957.

Doctor Ming was born in Clinton, Missouri and graduated from Washington University Medical school, St. Louis, Missouri. He moved to Okmulgee in 1911 where he began the practice of medicine.

Doctor Ming was a member of the Okmulgee County Medical Society, the Oklahoma State Medical Association and the American Medical Association. He also was a member in the Alpha Omega Alpha, an honorary medical fraternity, and Church of the Redeemer, Episcopal, and was a diplomate of the American Board of Roentgenology.

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Guest Speakers Announced For City Clinical Society Meeting

Guest speakers for the 27th Annual Meeting of the Oklahoma City Clinical Society meeting which will be held in the Biltmore Hotel, Oklahoma City, on October 28, 29, and 30, 1957, were announced recently. Scheduled to speak at the meeting are:

Harry E. Bacon, M.D., Philadelphia, Pa. Professor and Head, Dept. of Rectal and Colonic Surgery, Temple University; David M. Posworth, M.D., Professor and Director Orthopedic Surgery New York Polyclinic Graduate Medical School and Hospital, New York City; Carleton B. Chapman, M.D., University of Texas Southwestern Medical School, Professor of Medicine, University of Texas Southwestern Medical School, Dallas, Tex.; Frank C. Coleman, M.D., Ass't. Clinical Professor, Dept. of Pathology, University of Nebraska College of Medicine, Omaha, Nebraska; Edmond L. Cooper, M.D., Instructor in Ophthalmology, Wayne University College of Medicine, Detroit, Mich.; James L. Dennis, M.D., Medical Director of Children's Hospital of the East Bay, Oakland, Calif.; James E. Eckenhoff, M.D., Prof. of Anesthesiology, University of Pennsylvania School of Medicine, Philadelphia, Pa.; Isadore Lampe, M.D., Prof. of Radiology, University of Michigan Medical School, Ann Arbor, Mich.; Milton L. McCall, M.D., Professor and Head, Dept. of Ob & Gyn., Louisiana State University School of Medicine, New Orleans, La.; Edmund R. Novak, M.D., Instructor in Gynecology at Johns Hopkins Hospital, Baltimore, Maryland; Rees B. Rees, M.D., Assoc. Clinical Professor and Chairman of the Sub-Department of Dermatology, University of California School of Medicine, San Francisco, Calif.; Harry W. Southwick, M.D., Assoc. Professor of Surgery, University of Illinois College of Medicine, Chicago, Ill.; Homer Swanson, M.D., Assoc. Professor in (Neurological) Surgery, Emory University Medical School, Atlanta, Ga.; Theodore E. Walsh, M.D., Professor and Head, Dept. of Otolaryngology, Washington University School of Medicine, St. Louis, Mo.; Austin S. Weisberger, M.D., Assoc. Professor of Medicine, Western Reserve University School of Medicine, Cleveland; Kenneth McFarland, Ph.D., Nationally Known Lecturer and Entertainer, Educational Consultant and Lecturer for General Motors Corp. and Educational Consultant for American Trucking Associations, Inc.

For further information write executive secretary, 503 Medical Arts Bldg., Oklahoma City.

Atomic Reactor to Be Used For Education at O.S.U.

The Aerojet-General Nucleonics corporation's AGN-201 reactor displayed at the "Cavalcade of Health" will form the core of laboratory instruction in Nuclear Engineering at Oklahoma State University, Stillwater.

Oklahoma State has provided instruction in nuclear physics for many years, and in 1955 instituted courses in nuclear reactor engineering and technology. These course offerings are being expanded and the Oklahoma State college of engineering is currently seeking approval of a program leading to a Master of Science degree in Nuclear Engineering.

Under this new program graduate students will receive a full year of instruction in nuclear physics, advanced mathematics, radiochemistry, nuclear reactor theory and technology of the nuclear industry.

Laboratory experiments accompanying the nuclear reactor theory courses will be centered around the AGN-201 reactor laboratory at Oklahoma State.

These experiments will be designed to demonstrate the basic principles of nuclear reactors and to give the students experience in measuring readioctivity.

Typical of work which will be done by the nuclear engineering students are experiments in measurement of the fundamental constants characterizing reactors, in radiological survey of reactors, and in operating behavior of the devices.

The nuclear engineering laboratories, including purchase of the $95,000 AGN-201, and a new laboratory for nuclear physics instruction were made possible by a $144,-850 grant to Oklahoma State by the US Atomic Energy commission.

25 YEARS AGO

Articles published in *The Journal* of the Oklahoma State Medical Association July, 1932. Edited by John C. Matt, M.D., Tulsa.

Some Recent Advances in the Treatment of Pulmonary Tuberculosis

R. M. SHEPARD, Tulsa

"The fundamental principles in the treatment of diseases of the lungs are the same that have existed for centuries, that is the triad: fresh air, good food, and rest. All the modern methods of treatment are based upon the extent and character of the disease and the method of obtaining the maximum amount of rest for the lung lesion itself. The X-ray has been a great boon to the study of diseases of the chest. Misguided is the chest specialist who attempts to treat disease of the lungs without the aid of the X-ray. It will show many conditions that cannot be found with the stethoscope and general examination. However we must not depend on the X-ray alone for the entire story. The X-ray should not make a diagnosis nor give the degree of healing or activity, however, serial plates will show the progress.

The treatment of any lung disease should not be undertaken without first securing a satisfactory stereogram of the chest, regardless of the physical findings and clinical symptoms. With an intelligent interpretation of the films with due consideration for symptoms, complications, and physical findings the method of treatment can be planned. After the routine bed rest and the usual dietetic and postural rest regime the more valuable methods are compression or local rest of the lung or diseased area by artificial pneumothorax, phrenicectomy, intrapleural pneumolysis, multiple intercostal neurectomy, thoracoplasty, and oleothorax.

Artificial Pneumothorax

Artificial pneumothorax at this time is the outstanding method of treatment of tuberculosis. It is a known fact that 60% of the cases of active pulmonary tuberculosis should have artificial pneumothorax compression of the lung. The selection of cases for pneumothorax, and the indications for its use, should be based upon the condition of the patient and the extent of involvement and not upon the endeavor for good statistics.

Since the World War the therapeutic value of artificial pneumothorax in the treatment of pulmonary tuberculosis has become so well recognized that it is a part of equipment of practically every chest specialist in the world . . .

The use of pneumothorax in lung abscesses and bronchiectasis must be carefully considered and administered only in cases where there is adequate drainage to the bronchus or abscessed near the hilus. Most patients will see a marked decline in their temperature, cough, and expectoration after pneumothorax has been administered, however, there usually is some disturbance of the appetite with a slight loss of weight during the first few treatments. In large cavities, beneath the pleura, of long standing and an active infection in the contra-lateral lung pneumothorax is hazardous because more likely there will be pleural adhesions near the cavity and tuberculous pleuritis will subsequently develop by the tubercle bacilli permeating the cavity wall into the pleural space, or rupture of the pleural wall in stripping the visceral from the parietal pleura by the air . . .

Phrenicectomy

Phrenicectomy is indicated in basal infection of tuberculosis, bronchiectasis, lung abscess near the base or hilus, and in cavities that cannot be closed by artificial pneumothorax, or where there are so many adhesions between the visceral and parietal pleura that air cannot be injected. The phrenic nerve is severed and the lower end extracted together with any accessory branches. Radical phrenicectomy will redrce the lung volume from 20 to 30% with the immobilization of the hemi-diaphragm and a rise of the diaphragm into the chest cavity. There is very little results obtained by the phrenicectomy when the diaphragm is fixed or adhered to the base of the lung and chest wall. There is also a lack of results when done in an acute exudative pulmonary tuberculosis. The writer has found that 90% of the cases operated had a great reduction in the cough within twenty-four hours after the operation. There is also a sense of relief in the chest in which the operation is done immediately following the operation with a significant diminution of sputum. Although phrenicectomy is more valuable to close cavities at the base the writer has seen many large cavities at the apex closed by the operation. We must remember that phrenicectomy should be used as an adjunct or substitute for pneumothorax when artificial pneumothorax is impossible and never to supplant artifical pneumothorax. . . .

Thoracoplasty

Thoracoplasty has won a valuable position in the treatment of tuberculosis in cases of unilateral activity where other methods such as artificial pneumothorax, phrenicectomy, intrapleural pneumolysis and multiple intercostal neuroectomy have failed. Thoracoplasty is usually done in two or more stages. A section of all the ribs from first to eleventh inclusive are removed. In veiw of the fact that all cavities should be closed by some means of interference thoracoplasty will often do it when other methods have failed. However, it is imperative that the contralateral lung be free from any activity and the patient free from any tuberculous com-

plications. It has been of great value in cases where there is large perforations from the lung with subsequent infection and empyemias of the pleura. However, thoracoplasty should not be done until the pleura has been sterilized by the administration of oil—Gomenol. Thoracoplasty as a rule should be preceded by a phrenicectomy and less extensively done on the right side of the chest because of the right heart muscle being thinner and having less resistance to pressure produced by the removal of large amount of ribs. It is an operation not to be considered lightly, but will cure many otherwise hopeless cases. . . . . .

Summary

To sum up the results obtained by the various methods of treatment it seems that compression represents the best recent advance. There is no treatment to equal artificial pneumothorax in the cases where it can be successfully administered, and no other treatment should be substituted or used until pneumothorax has been tried. A patient with an open cavity and tubercle bacilli in the sputum has about one chance in five to live as much as three years unless the cavity is closed or sterilized by some method. Furthermore ridding the sputum of tubercle bacilli will save the infection of many children and others with whom they come in contact. The physician who would treat tuberculosis must keep informed of the advance in various methods for each month brings new experiences and methods of immense value to the public and patient."

Editorial Notes—Personal and General

"Physicians of Okmulgee entertained physicians from neighboring counties at a golf tournament, with all the trimmings, June 16th. . . . . .

Doctors F. W. Ewing, M. K. Thompson, and C. E. White, Muskogee, have returned from a fishing trip on the Kiamichi river, where they spent a week in June. . . . . .

Dr. L. J. Moorman, Oklahoma City, dean of the University of Oklahoma School of Medicine, was elected president of the National Tuberculosis Association at the annual convention in Colorado Springs, Colorado, in June. . . . . .

Jackson County Medical Society met May 3rd at Waurika. Dr. E. C. Mabry, Secretary, announced the following program:

"Specific Urethritis and Complications" by Dr. W. P. Rudell, discussed by Drs. J. R. Reed and L. H. McConnell.

"Breech Presentations Management" presented by Dr. Jesse Bird, discussed by Drs. E. S. Crowe and Knox Colljer." . . . . .

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WANTED General Practitioner to give anesthetic in private clinic. Please advise qualifications in first letter. Box D, c/o THE JOURNAL, P. O. Box 9696, Shartel Station, Oklahoma City, Okla.

PHYSICIAN PLACEMENT

Anesthesia

Daniel B. Perry, Residence Quarters, Harlem Hospital, New York, N. Y., age 48, Meharry Medical College, 1948, interned at Harlem Hospital, New York and served residency in anesthesia there, veteran, available December, 1957.

General Practice

Louis Marshall Cuvillier, Jr., 1407 Woodside Parkway, Silver Spring, Maryland, age 44, married, George Washington University School of Medicine, 1938, interned at Garfield Memorial Hospital, Washington, D.C., one year residency in medicine and obstetrics at Norfolk General Hospital, Norfolk, Virginia. Veteran, available upon 90 day notice.

Orby L. Butcher, Jr., 3106 Alaska, Dallas, Texas, age 29, married, University of Oklahoma, 1955, now in surgical residency at VA Hospital in Dallas, Veteran. Available, July, 1957.

David L. Mossman, USAH, Orthopedic Department, Ft. Riley, Kansas, age 28, married, University of Vermont, 1954, available upon separation from service, December, 1957.

Robert R. Rupp, 1235 N. Lorraine, Wichita, Kansas, age 30, married, University of Oklahoma, 1956, internship at Wesley Hospital, Wichita, veteran, available, July 1, 1957.

Internal Medicine

Rensselaer, W. M.Clure, Mayo Foundation, Rochester, Minnesota, age 31, married, University of Kansas, 1948, veteran, available July 1, 1957.

James E. Morris, Jr., 1034 Second St., S.E., Moultrie, Georgia, age 26, married, University of Tennessee College of Medicine, 1953, one year internal medicine residency, now serving military obligation, available February, 1957.

Robert W. Datesman, 94 Oak Street, Westwood, Massachusetts, age 30, married, University of Pennsylvania, 1951, residency training at University of Minnesota Hospitals, and Boston Veteran Hospital, Veteran, available in July, 1957.

Joseph A. Ezzo, 3215 Nebraska, St. Louis 18, Missouri, age 32, married, St. Louis University, residency at St. Louis City Hospital and St. Louis University Hospitals, veteran, available, July 1, 1957.

Obstetrics-Gynecology

John P. Harrod, Jr., 932 E. 56th Street, Chicago 37, Illinois, age 33, married, University of Georgia, 1946, served residency at University Hospital, Augusta, Ga., Duval County Hospital, Jacksonville, Florida and at Chicago Lyons-In Hospital, Board certified, veteran, availability date unkown.

Bernard Martin Davis, Jr., 101 Turnbridge Rd., Baltimore 12, Maryland, age 31, married, Georgetown University, 1951, 3 years residency at University Hospital, Baltimore, veteran, available, July 1, 1957.

Pediatrics

Robert W. Mosely, 211 Adams Street, Galax, Virginia, age 32, married, Medical College of Virginia, 1948, residency at Walter Reed Army Hospital, Board eligible, interested in private practice or public health, veteran, available April, 1957.

Surgery

Aristides Cardona, 106 Sinis Rd., Syracuse, New York, age 30, married, State University of New York, 1951, Board eligible, wants additional residency, veteran, available, June, 1957.

Vernon L. Guynn, 2026 S. Second Ave., Maywood, Ill., age 32, married, University of Illinois, 1947, passed Part I of General Surgery Board, military obligation served, available January 1, 1957.

Alvin S. Natanson, 49 Kiernan Drive, Rantoul, Illinois, age 36, married, Tufts Medical College, 1949, residency training at Boston City Hospital, Diplomate of the American Board of Surgery, available upon separation from service, July, 1957.

James Firth Alexander, Charity Hospital, New Orleans, Louisiana, age 34, single, Ohio State, 1949, in orthopedic residency training now, veteran, available immediately.

Karl Edwin Blake, 2681 Crosby Avenue, Pittsburgh 16, Pa., age 33, married, University of Pittsburgh, 1948, residency at VA Hospital and Children's Hospital, Pittsburgh, Board Eligible, veteran, available May, 1957.

Urology

John C. Brazos, 406 South Washington, Watertown, Wisconsin, age 36, married, University of Illinois, 1949, interned at Anckee County Hospital, St. Paul, Minnesota, residency at Milwaukee County Hospital, Milwaukee, Wisconsin. Veteran, available upon completion of residency, July 31, 1957.

Paul Lucian Livingston, 18340 Lake Chabot Road, Castro Valley, California, age 35, married, New York Medical College, 1946, served residencies at Orange Memorial Hospital, New Jersey and at Veterans' Administration Hospital, Long Beach, California, now Assistant Chief Urologist at V.A. Hospital, Board Qualified, veteran, available upon sixty days notice.

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PROCEEDINGS OF THE HOUSE OF DELEGATES OKLAHOMA STATE MEDICAL ASSOCIATION

CLOSING SESSION

May 6, 1957

The closing session of the 51st Annual Session of the House of Delegates of the Oklahoma State Medical Association was called to order at 8:00 p.m. in the Pompeian Room of the Mayo Hotel in Tulsa, Oklahoma, May 5, 1957, by the Speaker of the House, Clinton Gallaher, M.D.

The Credentials Committee reported a quoram was present.

Doctor Gallaher called for introduction of additional guests. None were presented.

Doctor Gallaher announced that the reports from the Committees would continue.

The first report to be presented was from the American Medical Education Foundation Committee. The Report was delivered by the Chairman, Joe L. Duer, M.D., Woodward.

American Medical Education Foundation Committee

At the 1956 meeting of the House of Delegates, $500.00 was appropriated for the promotion of the AMEF in Oklahoma. An estimated $170 was spent on one mailing for that purpose, leaving a balance of $330 not used.

This mailing was made in December, 1956 and consisted of a letter to each County Secretary, and to each member of the Oklahoma State Medical Association. It produced a total of $425 in contributions to the AMEF; the best monthly contribution ever made in Oklahoma.

Oklahoma remains near the bottom of the list in contributions. The total contributions for 1956 was $1,451. Of this sum $741 was contributed by the Woman's Auxiliary, leaving a balance of $710 from the Medical Profession.

Total contributions earmarked for Oklahoma University School of Medicine amounted to $6,501.00. Since funds provided by the Woman's Auxiliary are not usually earmarked, this means that out of State contributions provided a total of $5,971, while $710 was contributed by in-state doctors, If all contributions were earmarked for the Oklahoma University School of Medicine, which would not be the case.

As of December 31, 1956, AMEF has raised and distributed $5,757,039.00 since its beginning in 1951. Oklahoma University School of Medicine has received during that time a total of $162,828.00. Oklahoma has contributed $6,314.50 . . . a very sorry figure indeed.

Your Committee recommends that every physician in Oklahoma be urged and encouraged to contribute annually through the AMEF at least $25, or as an ilternative, one percent of the physicians Federal income tax per year. This would be a meager price indeed to prevent federalization of our medical schools, and a much more meager price as compared to an increase of taxes to support such a plan.

Voluntary contributions for the support of the Medical Schools are the least and best chance we have to prevent federalization. It can be done at very little cost to anyone.

Your Committee requests, urgently, that continued financial support be given and that the Association take much more aggressive action in furthering the sponsoring of this cause. Your Committee is aware that there are variances in opinion about the manner of distribution of these funds, and the manner in which they are handled. It is the considered opinion of your Committee that the primary objective for which funds are needed, and the very objectionable features of any alternate governmental plan should far outweigh any personal opinions as to some of the problems of management of such funds. Such problems could well be altered in the future, while a governmental plan would not only be permanent but would increase in its objectionable features as time passed.

This report is respectfully submitted. I move its acceptance, and that the recommendations herein made be fully considered.

The motion of acceptance made by Doctor Duer was duly seconded and carried.

In subsequent comments in which the matter of correlation between the Medical School and the Association was discussed, the following motion was offered by Doctor Marshall O. Hart: "The President of the Oklahoma State Medical Association appoint a Committee to study the work, and correlate the activities of the Medical School and the Association, further, that this be a study Committee. The motion was seconded.

The Chair recognized Doctor Malcom E. Phelps, who stated, that he felt the intent of the motion was excellent, but offered the following as a substitute motion: "The House of Delegates communicate with the Dean of the Medical School and advise him that the Association is ready to assist him if he so desires. This motion was seconded and carried.

Doctor Gallaher called for the next report, which

was from the Committee on Military Affairs, and in the absence of the Chairman, Doctor F. Redding Hood, Oklahoma City, the report was read by the Recording Secretary.

Military Affairs Committee

The Committee on Military Affairs has not had occasion to meet during the past year. However, as the chairman of the Oklahoma Voluntary Advisory Committee, I should like to advise the House of Delegates that the most recent information from Washington is to the effect that the Doctor-Draft Law will be allowed to expire in June of this year. Further information from Washington indicates that there will be an amendment to the present Selective Service Act, which will allow the Selective Service System, through its Local Boards, to call physicians, dentists, veterinarians and allied specialties out of order. This will accomplish practically the same purpose as the Doctor-Draft Law, although it will alleviate the physician from dual jeopardy.

It is not anticipated that there will be another call for additional physicians under the Doctor-Draft Law. The last call was for 15 physicians from Oklahoma, and this call has been met and these physicians will go on active duty in May and June of this year. Of the fifteen called, only two are known to have been in private practice. It is your Chairman's recommendation that this Committee be maintained, although its work may be drastically curtailed.

Following this report, it was moved by Doctor R. W. Goen, Tulsa, that this report be accepted. Motion was duly seconded and carried.

The next report to be heard was from the Committee on Occupational Medicine. In the absence of the Chairman, Doctor Kieffer Davis, Bartlesville, the report was delivered by Mr. Don Blair, Associate Executive Secretary.

Occupational Medicine Committee

The Committee of Occupational Medicine of the Oklahoma State Medical Association was re-established some one and one-half years ago. The members of the Committee are of the opinion that considerable constructive work in the general realm of occupational health could be accomplished through this particular arm of the state organization and accordingly present for your consideration the following proposals for its long range program:

1. Develop a procedure whereby the Committee on Industrial Health could provide consultation or information to those persons forwarding inquiries relative to industrial health problems.

2. Increase membership of the Committee sufficiently to allow establishment of certain subcommittees to develop specific information in the area of (a) workmen's compensation, (b) preventive aspects of industrial health, including physical examination programs, immunization programs, and industrial hygiene, (c) noise in industry.

3. Promote a more mutual understanding of goals between physicians engaged in the practice of industrial medicine, full-time or part-time, and other physicians, generalists, and specialists, by (a) establishing a speaker's bureau whose members could present programs before meetings of county medical societies, civic clubs, and groups of industrial managers, (b) preparation of program material for the annual state meeting, (c) sponsorship of scientific exhibits on occupational medicine at the state meetings.

4. Integrate the work of the Industrial Health Committee with other scientific committees of the Oklahoma State Medical Association, with whom common interests exist, such as the Committee of Cardiology, Committee on Otolaryngology, Committee on Ophthalmology, Committee on Trauma, etc.

5. Prepare a refresher course in industrial medicine and surgery for the physicians engaged in this type of practice, to be held during the annual meeting of the Oklahoma State Medical Association, or at the University of Oklahoma Medical Center at a time other than that of the Annual Meeting, but to be sponsored and publicized by the OSMA.

6. To explore the possibilities of participation in local and state meetings of volunteer health agencies, so that mutual goals can be understood, and industrial health personnel and agency personnel work together in exchanging information.

This Committee respectfully submits this report to you and the governing bodies of the Oklahoma State Medical Association with our recommendations that it be adopted.

Following this report it was moved by Doctor Malcom Phelps that this report be accepted. Motion was seconded and carried.

Doctor Gallaher announced that the next report was from the Committee on Rural and School Health. In the absence of the Chairman, the report was delivered by Mr. Don Blair.

Committee on Rural and School Health

In view of the fact that the Oklahoma State Medical Association had planned to participate in Oklahoma's Semi-Centennial Exposition with an extensive health education show, your Rural and School Health Subcommittee elected to forego the sponsoring of the Rural Health Conference as has been the Committee's prime project for the past three years. Since the Rural Health Conference is primarily a health education show, directed to the laity, it was the feeling of the Committee that such action in 1957 would result in a duplication of effort in the light of the Association's "Cavalcade of Health".

The Committee believes however, that the State Association's Rural Health efforts should be resumed in the coming year and urges continued endorsement by the House of Delegates.

At the conclusion of this report it was moved by Doctor Goen that the report be accepted. The motion was duly seconded and carried.

Doctor Gallaher turned the Chair to Doctor J. Hoyle Carlock, Vice-Speaker of the House of Delegates.

Doctor Carlock called on Doctor A. T. Baker, Durant, Chairman of the Resolutions Committee, for its report.

Resolutions Committee

Doctor Baker read the following Resolution, submitted by the Resolutions Committee:

WHEREAS, The American Medical Association is the parent body of all State Medical Associations, and

WHEREAS, the programs sent to State and County Medical Associations for implementation are meritorious, and

WHEREAS, There are limitations in available personnel, physical facilities, and financial resources of all State Medical Associations and the general public

NOW THEREFORE BE IT RESOLVED, the House of Delegates of the Oklahoma State Medical Association request that the Board of Trustees of the A.M.A. review all programs in the Health Field to be implemented by State and County Medical Associations for the purpose of presenting programs that can be better carried out within the limited framework of the resources of the State and County Medical Associations.

Doctor James R. Colvert moved the adoption of this Resolution. Motion was seconded and carried.

Doctor Baker read the following Resolution which was submitted by the Resolutions Committee:

WHEREAS, Louis H. Ritzhaupt, M.D. has been for more than twenty-five years a member of the Oklahoma Legislature, and

WHEREAS, Doctor Ritzhaupt has always given of his time and ability to public affairs, over and above medical care to his large segment of patients at a personal sacrifice.

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association recognize the contribution Doctor Ritzhaupt has made to the State of Oklahoma, and commend him for the sacrifice that he has made in behalf of the people of Oklahoma.

It was moved by Doctor Malcom Phelps that this Resolution be adopted, and that a standing vote of commendation be extended to Doctor Ritzhaupt. Motion was seconded and carried.

The next Resolution to be presented by Doctor Baker was submitted by the Oklahoma County Medical Society.

WHEREAS, At the present time the University of Oklahoma Board of Regents does not have a physician representative on this Board, and

WHEREAS, The University of Oklahoma School of Medicine is an important and integral part of the University of Oklahoma, and

WHEREAS, The members of the Oklahoma State Medical Association are vitally interested in the affairs of the University of Oklahoma School of Medicine

NOW THEREFORE BE IT RESOLVED, The Oklahoma State Medical Association in Annual Meeting in Tulsa, May 5, urges and recommends that a doctor of medicine be appointed to the University of Oklahoma Board of Regents, in order that the Board of Regents may be more conversant with the problems of medical education, in order that the welfare of the people of Oklahoma may be better served.

It was moved by Doctor Colvert that this Resolution be adopted, and that a copy of same go to the Governor of the State of Oklahoma. Motion was duly seconded and carried.

Doctor Baker presented the next Resolution, which was submitted by the Oklahoma County Medical Society.

WHEREAS, The Veterans Administration Hospitals are in direct competition with the doctors in the private practice of medicine and surgery as is evidenced by their treatment of Workman's compensation cases and patients with private insurance, and non-service connected patients who can obviously afford private care.

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association instruct the Delegates to the A.M.A. to bring the matter before the A.M.A., and propose legislation be set up for an admission committee at each VA Hospital to rigidly screen admissions to exclude all workman's compensation cases and non-service connected cases with private insurance company coverage, and non-service connected cases who are able to pay for private care.

BE IT FURTHER RESOLVED, The House of Delegates of the Oklahoma State Medical Association contact their Congressional Delegation setting forth their views in regard to this matter.

The Resolutions Committee recommended the adoption of this resolution.

It was moved by Doctor James Amspacher, Oklahoma City, that this Resolution be adopted. The motion was seconded and carried.

The next Resolution to be presented by Doctor Baker originated in the Resolutions Committee.

WHEREAS, The House of Delegates of the Oklahoma State Medical Association has had brought to its attention the stand taken by the Oklahoma County Medical Society concerning the care of Veterans in the Veterans Administration Hospitals, and

WHEREAS, in addition to the care of veterans in the VA Hospitals, the problem of Veterans with the service, or non-service connected disability, who may be under workmen's compensation or private insurance, or who is financially able to pay for his own medical service, has been presented to the Veterans Administration in its entirety

NOW THEREFORE BE IT RESOLVED, That the House of Delegates of the Oklahoma State Medical Association endorses and commends the action taken by the Oklahoma County Medical Society.

Doctor Baker stated that the Committee on Resolutions recommended the adoption of this Resolution.

It was moved by Doctor Duer that this Resolution be adopted. The motion was duly seconded and carried.

Doctor Baker offered the following resolution, submitted by the Tulsa County Medical Society.

WHEREAS, At the biennial Sessions of the Oklahoma State Legislature many bills are proposed which are of vital interest and concern to Oklahoma Medicine and affiliated professions, and

WHEREAS, There is a need for the prompt dissemination of information about these legislative proposals to the various component county medical societies, to the extent that appropriate actions may be taken for and against such proposals

NOW THEREFORE BE IT RESOLVED, That the Legislative Subcommittee of the Public Policy Committee of the Oklahoma State Medical Association publish and informative newsletter during each session of the Oklahoma State Legislature, said newsletter to be published at frequent intervals, and

BE IT FURTHER RESOLVED, That the said newsletter set forth the details of all bills proposed which are of interest to Oklahoma Medicine, along with appropriate comment and information, including any information as to the official positions adopted by the Association on particular bills, and

BE IT FURTHER RESOLVED, This newsletter be mailed to the officers of all component county medical societies and to members of legislative committees of the component societies.

The Committee on Resolutions felt that in view of the report of the Public Policy Committee which accepted the intent and purpose of this Resolution, there need be no further action on this matter.

It was moved by Doctor Colvert that the Resolution be adopted, and that said publication be sent to all members of the Association. Motion was seconded and carried.

The next Resolution to be read by Doctor Baker was submitted by the Comanche-Cotton County Medical Society.

WHEREAS, The physicians of Comanche County, State of Oklahoma have attended considerable numbers of patients under the Medicare plan based on Public Law 569, 84th Congress, and feel they are more conversant with problems produced by it, and

WHEREAS, it s probable that any extensions of this plan, or establishment of a similar plan, to include other government empolyees and/or their dependents, veterans, members of the household of military personnel other than wife and dependent children, would inevitably result in more complete socialization of medical services to the American people, and

WHEREAS, We, as physicians, taxpayers, veterans and American citizens, desire to support the current Medicare system as a recruiting instrument and economic solution to the medical problems of military dependents, therefore

BE IT RESOLVED That we are oposed to extension of such plan to include more than those presently included, and

BE IT FURTHER RESOLVED, That deviation from the proper doctor-patient relationship is deplored.

It was the recommendation of the Resolutions Committee that this Resolution be accepted.

The adoption of this Resolution was moved by Doctor Malcom Phelps. Motion was seconded and carried.

The next Resolution to be offered by Doctor Baker was submitted by the Legislative Committee.

WHEREAS, This subject has been of much interest to Oklahoma doctors with many divergent views of individual physicians as to the future course of official medical policy in this regard, and

WHEREAS, It is desirable that the delegates from Oklahoma to the A.M.A. be instructed as to the wishes of their constituents,

NOW THEREFORE be it resolved that the subject of participation of medical doctors in the Federal Social Security System on a compulsory basis be introduced for discussion at the House of Delegates of the Oklahoma State Medical Association on Sunday, May 5, and

BE IT FURTHER RESOLVED, That the House of Delegates instruct the delegates from Oklahoma to the House of Delegates of the A.M.A. that its members favor participation in Federal Social Security on a compulsory basis.

Doctor Baker advised that the Resolutions Committee was unanimous in recommending that this Resolution not be adopted, and the Committee moved by unanimous vote that the Delegates from the Oklahoma State Medical Association to the House of Delegates of the A.M.A. be instructed to vote against the inclusion of physicians in Social Security.

Following the reading of this Resolution, and subsequent comment concerning the Resolution and the recommendation of the Committee, it was moved by Doctor Colvert that the last paragraph of the Resolution be amended to read: "Our Delegates to the A.M.A. be instructed by our vote to vigorously oppose at any national A.M.A. meeting, any Resolution favoring effort to bring doctors under Social Security." The motion was duly seconded.

Doctor John F. Burton spoke briefly concerning Social Security and subsequently moved that Doctor Colvert's motion be tabled and the original motion as recommended by the Resolutions Committee be adopted.

Doctor Ritzhaupt rose to a point of order stating that a motion could not be made following an address.

Doctor Burton, as a result of the point of order, moved that Doctor Colvert's motion be tabled and the original motion as recommended by the Resolutions Committee be adopted. The motion was duly seconded.

At the beginning of the discussion, Doctor Marvin Glismann, Oklahoma City, rose to a point of order stating that a motion to table was not discussable.

There followed a motion that the vote be by secret ballot, made by Doctor Colvert. This motion was subsequently lost.

The motion as stated by Doctor Burton was voted on by a show of hands and carried.

The next Resolution was presented by Doctor Baker. This Resolution originated in the Resolutions Committee.

WHEREAS, The health of the people of Oklahoma is dependent on the activities of the Public Health Department in the preventive field, and

WHEREAS, The medical profession of the State of Oklahoma is likewise alert to the same program.

NOW THEREFORE BE IT RESOLVED, That the program of the Oklahoma State Department of Health and the intents and purposes of the medical profession be coordinated to the extent that the people of Oklahoma will have the best and most curative program possible.

It was moved by Doctor Ritzhaupt that this Resolution be adopted. The motion was seconded and carried.

This concluded the report of the Resolutions Committee.

Doctor Carlock turned the Chair back to the Speaker, Doctor Gallaher.

Doctor Gallaher stated that next on the Agenda of the House was the report from the Committee on Constitution and By-Laws. This report given by the Chairman, Doctor William T. Gill of Ada.

Doctor Gill stated that all amendments to the By-Laws had been introduced at the previous session.

This proposed amendment to the Constitution was duly presented to the Annual Session of the 1956 House of Delegates.

AMEND Article V, Section 1 of the Constitution by adding after the words "The Oklahoma Delegates" and before the word "to", the following: "and alternates".

Doctor Gill moved the adoption of this amendment. The motion was seconded and carried by a two-thirds majority of the Delegates.

This proposed amendment to the Constitution was presented to the Annual Session of the House.

AMEND Article VI, Section 1 of the Constitution to read:

"Section 1. The Council shall consist of one Councilor and one Vice-Councilor elected from each Councilor District, The President, Vice-President, President-Elect, Secretary-Treasurer, Speaker of the House, Vice-Speaker of the House, and the Delegates and Alternates of the Oklahoma State Medical Association to the American Medical Association."

Doctor Gill moved the adoption of this Amendment. It was duly seconded and carried by a two-thirds majority of the Delegates registered.

The following three proposed amendments to the constitution were then presented to the House of Delegates for action at 1958 Annual Session of the House of Delegates.

AMEND Article VI, Section 1, of the Constitution by deleting the words "and" before the words "the Delegates", and add at the end of the section.

"The Editor-in-Chief of the **Journal** and most recent two past Presidents of the Association."

AMEND Article V, Section 2, of the Constitution by adding at the end of the section, ", and may remove them from office for cause."

AMEND Article VIII of the Constitution by adding: "Section 5. Any General officer of the Association may be removed from office for cause."

Necessary Amendments to the By-laws which will be required if these Constitutional Amendments are adopted have been prepared for presentation to the House of Delegates next year.

This Amendment to the By-laws, having been read to the previous Session of the House of Delegates is presented for final action. Its purpose is to give the Council direct disciplinary power over members of component societies.

AMEND Chapter VII, Section 5, of the By-Laws by identifying present subsections (c) and (d) as subsections (d) and (e), respectively, and adding subsection (c) as follows:

"(c). If the conduct of any member of the Association reflects adversely upon the reputation of the Association or the medical profession, the Council may consider directly any charges which may be preferred against him, and, upon finding him guilty of unprofessional or unethical conduct, may discipline him by suspension of or explsion from membership in his component society, or otherwise. Discipline ordered by the Council shall be binding upon the component society, subject to its right of appeal to the House of Delegates of the Association, the Judicial Council or other appropriate body of the American Medical Association."

Doctor Gill moved the adoption of this Amendment. It was duly seconded and discussion ensued.

Doctor Ritzhaupt then moved that any further action on this amendment be postponed for one year, and that in the interim the matter be referred for an opinion by the Attorneys of the Association. This motion was duly seconded and carried.

The next proposed Amendment to the By-Laws was presented at the 1956 Session of the House of Delegates, and action was postponed for a year to permit more mature consideration. It is now ready for action.

AMEND Chapter I, Section 3 of the By-Laws by deleting Subsection (c), and,

AMEND Chapter II, Section 3 of the By-Laws by substituting for the words, "Honorary Members" and "Honorary Membership", wherever they appear, the words "Honorary Life Members" and "Honorary Life Membership", and by deleting in subsection (b) the following words:

"and whose service to humanity and the medical profession has been so unusually outstanding as

to merit honorary recognition may be placed on the honorary membership roll." and inserting in lieu thereof,

"and whose service to humanity and his profession has been conducted with dignity and honor may be placed on the honorary life membership roll."

AMEND Chapter III, Section 6 of the By-Laws by identifying it as subsection (a), and adding thereto, subsection (b), as follows:

"(b) Accomplishments in the field of medicine may be recognized by an award of a certificate of accomplishment. Such an award shall be initiated by a component society, approved by the Council prior to the Annual Session, and voted by the House of Delegates. To be eligible for such award, a physician shall have been a member of the Association for not less than five years immediately preceeding his recommendation therefore."

Doctor Gill moved the adoption of these amendments. The motion was duly seconded and carried.

Doctor Gill then reported that the Grievance Committee has been less efficient during the past year, during which it had been composed of seven regional members, than previously when it was composed of the living five past Presidents, and that the Council was of the opinion that the House of Delegates should consider reverting to the original plan of membership of this Committee. The plan for 1956-57 had been adopted by adopting the report of the Grievance Committee to study the operation of the Grievance Committee, at the closing session in 1956. Although the necessary Amendments to the By-Laws had been made a part of the report such Amendments had never been legally adopted because to amend the By-Laws, it is necessary to introduce the Amendment at one session, and act on it at a subsequent session. Thus, if it was the opinion of the House of Delegates that the original plan be returned to, no Amendments were necessary. However, in view of the attempted change in the membership of the Committee, and the presence of the report in the minutes of the 1956 House of Delegates in order to prevent a later question arising, Doctor Gill moved:

"That all provisions relative to the membership of the Grievance Committee adopted by the House of Delegates at its 1956 Annual Meeting be repealed, and that the Committee be constituted as originally provided by the By-Laws. This motion specifically repeals paragraphs numbered 1 to 7 inclusive, and only those paragraphs, of the Report of the Committee to study Operation of the Grievance Committee submitted to the 1956 House of Delegates."

This motion was duly seconded and carried.

This concluded the report of the Committee on Constitution and By-Laws.

Doctor Gallaher announced as the next order of business the election of officers.

The Speaker called for the election of President-Elect, and announced that the vote would be by secret ballot.

Candidates for this office were: Marshall O. Hart, M.D., Tulsa; and E. C. Mohler, M.D., Ponca City.

Doctor Gallaher requested the Tellers come forward to count the votes.

Following the tabulating of the votes, it was announced by the Chair that E. C. Mohler, M.D. was elected as President-Elect.

Next in order was the election of Vice-President.

It was moved by Doctor E. H. Shuller that the nomination for Vice-President be closed and that the nominee, Doctor A. L. Johnson, El Reno, be elected by acclamation. The motion was duly seconded and carried.

The next office to be filled was that of Secretary-Treasurer.

Doctor J. A. Colvert moved that the nominations be closed and that the nominee, Johnny A. Blue, M.D., Oklahoma City, be elected by acclamation. The motion was duly seconded and carried.

Next office to be filled was that of Delegate to the A.M.A., the nominee for this office being Malcom E. Phelps, M.D., El Reno. It was moved by Doctor A. L. Johnson that the nomination be closed and Doctor Phelps be elected by acclamation. The motion was seconded and carried.

Following this it was brought to the attention of the House by the President, Doctor McClure, that the term of the present Delegate, John Flack Burton, M.D., did not expire until January 1, 1958.

At this point Doctor Burton formally presented his resignation to the House of Delegates, as of this date.

It was moved by Doctor Colvert that the resignation of Doctor Burton be accepted with reluctance. The motion was seconded.

Doctor Joe L. Duer moved that the motion be amended to read: "and elect Doctor Phelps to fill the unexpired term left by Doctor Burton's resignation."

The motion was duly seconded and carried.

It was then necessary for Doctor Phelps to resign as Alternate Delegate to the A.M.A. It was moved by Doctor Colvert, and duly seconded, that the resignation of Doctor Phelps as Alternate Delegate be accepted. The motion was carried.

It was moved that the nominations for Alternate Delegate be closed and Doctor R. Q. Goodwin be elected by acclamation as Alternate Delegate to the A.M.A. (Motion made by Doctor Colvert) The motion carried.

It was then moved by Doctor Duer that Doctor R. Q. Goodwin be elected to fill the unexpired term occassioned by the resignation of Doctor Phelps. The motion was seconded and carried.

It was requested by Councilor District 2, that the nominees for election of Councilor and Vice-Councilor from this district be changed to read Councilor—Powell Fry, M.D., and Vice-Councilor—James Murphree, M.D.

Doctor Colvert moved acceptance of this change in nominees. Motion was seconded and carried.

Doctor Hugh Perry of Councilor District 8, asked that his name be withdrawn as nominee for Vice-Councilor and the name of Marshall O. Hart, M.D. be substituted as nominee for Vice-Councilor of that District.